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2009 USCG INNOVATION EXPO

Virginia Beach, VA

16 - 19 November 2009

Agenda

Monday, November 16, 2009

CGCIS Support to the Coast Guard Innovation Expo 2009

• LCDR Alan Tubb USCG Counterintelligence Service (CGCIS) MIFC LANT

Tuesday, November 17, 2009

Panel Session #1: The Myths of Innovation: Balancing the Benefits and the Costs of Risk Taking

Moderator: Ms. Lisa Bodell, CEO futurethink

Panelists:

- Mr. Bill Wing, President and CEO of Wing Inflatables Inc
- Mr. Edwin Addison, Innovation faculty member Johns Hopkins University, founder Addison Biomedicine, Inc
- Mr. Gary Koelling, Director, Emerging Media Technology, Best Buy, Inc.
- Mr. Timothy R. Girton, Technical Director, U.S. Coast Guard Research & Development Center

Panel Session #2: CG Acquisition: Strengthening the Coast Guard of the Future

Moderator: Mr. Tom D. Chalecki, Deputy, Office of Mission Support Integration (DCMS-5)

Panelists:

- RADM Ronald J. Rábago, USCG Assistant Commandant for Acquisition (CG-9) and Chief Acquisition Officer (CAO)
- RADM Paul Zukunft, USCG Assistant Commandant for Capability (CG-7)
- Ms. Clair Grady, Senior Procurement Executive & Head of Contracting Activity (CG-91)
- Mr. Dana Goward, Director of Assessment, Integration, and Risk Management (CG-51)
- CAPT Marshall B. Lytle, USCG Chief Information Officer /Acting Assistant Commandant for C4 and IT (CG-6)

Panel Session #3: Industry Thought Leaders: How Industry Brings Experience, Engineering, and Expertise to the Table.

Moderator: CAPT Joseph M. Re, USCG, Chief, Office of Performance Management and Decision Support (CG-0954) Panelists:

- Mr. Pat Stillman, Senior Vice President, SAIC
- Mr. Jack Littley, DSc, President and COO, Truestone
- Mr. Lee Wright, General Dynamics, C4 Systems
- Mr. Paul F. Bill, Deputy Director Business Development Armaments Systems, BAE Systems Land & Armaments
- Mr. Tom Crabtree, VP Booz Allen Hamilton

Wednesday, November 18, 2009

Panel Session #4: Coast Guard Modernization: Where We Are and Where We Are Heading

Moderator: RDML (sel) Sandra L. Stosz, USCG, Director, Enterprise Strategy, Management and Doctrine Oversight (CG-095) Panelists:

- RDML Kevin S. Cook, USCG, Director of Prevention Policy (CG-54)
- Mr. Jamie Zamora, Project Director and Management Consultant, NAPA
- Mr. Jeffery G. Orner, Deputy Assistant Commandant for Engineering & Logistics USCG (CG-4D)
- CAPT Richard M. Kaser, USCG, Chief of Staff, Atlantic Area / OPCO
- CAPT Charley L. Diaz, USCG, Chief of Staff, Pacific Area / FORCECOM

Mr. Martin J. Rajk, Deputy Assistant Commandant for Resources USCG (CG-8D)

Panel Session #5: Innovation Management: Harvesting Ideas for Exponential Efficiency Improvement

Moderator: Dr. Phil Samuel, Ph.D., Chief Innovation Officer, Breakthrough Management Group International **Panelists:**

- Ms. Tina Cariola, IdeaFactory Program Manager, Transportation Security Administration
- Ms. Montressa L. Washington, Senior Managing Consultant, IBM Global Business Services
- Ms. Christa Semko, Digital Media Strategist, Employee Storm, Dell Computers

Panel Session #6: Born Ready: Coast Guard Missions and the Guardian of Tomorrow

Moderator: Dr. Steve B. Wehrenberg, Ph.D., Director of Human Resources Strategy and Capability Development **Panelists:**

- CDR Kurt Virkaitis, USCG, Office of Net Assessment, Office of the Secretary of Defense
- Mr. Dan Ingold, Principle, Powersmith Energy Consulting
- Dr. Mark C. Gentry, Supervisor of Arctic Technology and Metocean, ExxonMobil Upstream Company
- Dr. Pablo Clemente-Colon, Chief Scientist of the National Ice Center (NIC), NOAA

2009 USCG Innovation Expo Tentative Agenda*
November 16-19, 2009
Virginia Beach Convention Center
Virginia Beach, Virginia
(*subject to change - 11/12/09)

Monday, November 16, 2009

8:00 a.m. – 5:00 p.m. Decorator set-up & Exhibitor set-up

Exhibit Halls A, B & C

Virginia Beach Convention Center

Tuesday, November 17, 2009

7:00 a.m. – 5:30 p.m. USCG Innovation Expo Attendee Registration &

Check-in

Pre-function Area

Virginia Beach Convention Center

7:00 a.m. – 8:00 a.m. Continental Breakfast
Ballroom Pre-function Area

Virginia Beach Convention Center

8:00 a.m. – 8:45 a.m. USCG Innovation Expo Opening Ceremony

Ballroom 1 & 2

Virginia Beach Convention Center

 USCG Welcome & Opening Comments CAPT Joseph M. Re, USCG Chairman, USCG Innovation Council

 NDIA Welcome & Opening Comments Lt Gen Lawrence P. Farrell, Jr., USAF (Ret.) President & CEO, NDIA

USCG Opening Remarks
 VADM David P. Pekoske, USCG
 Vice Commandant
 United States Coast Guard

 USCG Commandant Opening Remarks ADM Thad W. Allen, USCG
 23rd Commandant of the United States Coast Guard

USCG Innovation Expo Keynote Speaker Ballroom 1 & 2

Virginia Beach Convention Center

• Mr. Kerry Patterson

Author: "Crucial Conversations, Crucial Confrontations, Influence"

Expo Floor opens immediately after Keynote Speaker

Exhibit Halls A, B & C

Virginia Beach Convention Center

8:45 a.m. – 10:00 a.m.

10:00 a.m. – 5:30 p.m.

Tuesday, November 17, 2009 (cont.)

10:00 a.m. - 10:30 a.m.

Coffee Break

Exhibit Halls A, B & C

Virginia Beach Convention Center

10:30 a.m. - 12:00 noon

USCG Innovation Expo Panel Session #1: Ballroom 1 & 2

Virginia Beach Convention Center

The Myths of Innovation: Balancing the Benefits and

the Costs of Risk Taking

Moderator: Ms. Lisa Bodell, CEO futurethink

Panelists:

 Mr. Bill Wing, President and CEO of Wing Inflatables Inc

- Mr. Edwin Addison, Innovation faculty member Johns Hopkins University, founder Addison Biomedicine, Inc
- Mr. Gary Koelling, Director, Emerging Media Technology, Best Buy, Inc.
- Mr. Timothy R. Girton, Technical Director, U.S. Coast Guard Research & Development Center

This is a candid discussion about fostering an organizational culture that maintains a risk tolerant posture so it can reap the inherent benefits of innovation.

12:00 a.m. - 1:00 p.m.

Buffet Lunch Exhibit Hall D Virginia Beach Convention Center

Tuesday, November 17, 2009 (cont.)

1:00 p.m. - 3:00 p.m.

USCG Innovation Expo Panel Session #2: Ballroom 1 & 2 Virginia Beach Convention Center

CG Acquisition: Strengthening the Coast Guard of the Future

Moderator: Mr. Tom D. Chalecki, Deputy, Office of Mission Support Integration (DCMS-5)

Panelists:

- RADM Ronald J. Rábago, USCG
 Assistant Commandant for Acquisition (CG-9) and Chief
 Acquisition Officer (CAO)
- RADM Paul Zukunft, USCG
 Assistant Commandant for Capability (CG-7)
- Ms. Clair Grady, Senior Procurement Executive & Head of Contracting Activity (CG-91)
- Mr. Dana Goward, Director of Assessment, Integration, and Risk Management (CG-51)
- CAPT Marshall B. Lytle, USCG
 Chief Information Officer /Acting Assistant Commandant for C4 and IT (CG-6)

An informative brief by CG Acquisition experts followed by an open Q&A session. This event will address how today's initiatives are building an agile Coast Guard for tomorrow.

3:00 p.m. - 3:30 p.m.

Coffee Break Exhibit Halls A, B & C Virginia Beach Convention Center

Tuesday, November 17, 2009 (cont.)

3:30 p.m. - 5:00 p.m.

USCG Innovation Expo Panel Session #3: Ballroom 1 & 2 Virginia Beach Convention Center

Industry Thought Leaders: How Industry Brings Experience, Engineering, and Expertise to the Table.

Moderator: CAPT Joseph M. Re, USCG Chief, Office of Performance Management and Decision Support (CG-0954)

Panelists:

- RDML Kevin S. Cook, USCG Director of Prevention Policy (CG-54)
- Mr. Jeffery G. Orner, Deputy Assistant Commandant for Engineering & Logistics USCG (CG-4D)
- CAPT Richard M. Kaser, USCG Chief of Staff, Atlantic Area / OPCOM
- CAPT Charley L. Diaz, USCG
 Chief of Staff, Pacific Area / FORCECOM
- Mr. Martin J. Rajk, Deputy Assistant Commandant for Resources USCG (CG-8D)
- Dr. Steve Kelly,
 VP for Home Market Business Development, BAE

A panel of experts discussing Independent Research and Development (IRAD), experience, and knowledge disciplines that help the Coast Guard achieve mission excellence.

5:30 p.m. - 7:00 p.m.

Welcome Reception Exhibit Halls A, B & C Virginia Beach Convention Center

Wednesday, November 18, 2009

7:00 a.m. - 5:30 p.m.

USCG Innovation Expo Attendee Registration Check-in (continues) Pre-function Area Virginia Beach Convention Center

7:00 a.m. - 8:00 a.m.

Continental Breakfast Ballroom Pre-function Area Virginia Beach Convention Center

Wednesday, November 18, 2009 (cont.)

8:00 a.m. - 09:30 a.m.

USCG Innovation Expo Keynote Speaker Ballroom 1 & 2 Virginia Beach Convention Center

"Strategic Innovation and Risk Management in a Changing World"

 Dr. Douglas Stone, Chairman & CEO of Rail Networks International, USMC (Ret.)

8:00 a.m. - 5:30 p.m.

Expo Floor opens Exhibit Halls A, B & C Virginia Beach Convention Center

10:00 a.m. - 10:30 a.m.

Coffee Break Exhibit Halls A, B & C Virginia Beach Convention Center

10:30 a.m. - 12:00 p.m.

USCG Innovation Expo Panel Session #4: Ballroom 1 & 2 Virginia Beach Convention Center

Coast Guard Modernization: Where We Are and Where We Are Heading

Moderator: RDML (sel) Sandra L. Stosz, USCG Director, Enterprise Strategy, Management and Doctrine Oversight (CG-095)

Panelists:

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- Mr. Jamie Zamora,
 Project Director and Management Consultant, NAPA
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- CAPT Richard M. Kaser, USCG Chief of Staff, Atlantic Area / OPCO
- CAPT Charley L. Diaz, USCG
 Chief of Staff, Pacific Area / FORCECOM
- Mr. Martin J. Rajk,
 Deputy Assistant Commandant for Resources USCG (CG-8D)

A discussion of the Coast Guard's current sweeping organizational changes and the tools, techniques, and best practice solutions that can help accomplish the vision.

Wednesday, November 18, 2009 (cont.)

12:00 p.m. - 1:30 p.m.

Box Lunch Exhibit Hall D

Virginia Beach Convention Center

1:30 p.m. - 3:00 p.m.

USCG Innovation Panel Session #5: Ballroom 1 & 2 Virginia Beach Convention Center

Innovation Management: Harvesting Ideas for Exponential Efficiency

Improvement

Moderator: Dr. Phil Samuel, Ph.D., Chief Innovation Officer, Breakthrough Management Group International

Panelists:

- Ms. Tina Cariola, IdeaFactory Program Manager, Transportation Security Administration
- Ms. Montressa L. Washington, Senior Managing Consultant, IBM Global Business Services
- Ms. Christa Semko,
 Digital Media Strategist, EmployeeStorm,
 Dell Computers
- Mr. Gary Koelling, Director, Emerging Media Technology, Best Buy, Inc.

How idea management tools promote innovation by helping organizations capture, manage, and evaluate ideas to improve organizational efficiency and effectiveness.

3:00 p.m. - 3:30 p.m.

Coffee Break Exhibit Halls A, B & C Virginia Beach Convention Center

Wednesday, November 18, 2009 (cont.)

3:30 p.m. - 5:00 p.m.

USCG Innovation Panel Session #6: Ballroom 1 & 2 Virginia Beach Convention Center

Born Ready: Coast Guard Missions and the Guardian of Tomorrow

Moderator: Dr. Steve B. Wehrenberg, Ph.D., Director of Human Resources Strategy and Capability Development

Panelists:

- Captain Bruce C. Jones, USCG Chief, Office of Strategic Analysis (CG-0951)
- CDR Kurt Virkaitis, USCG, Office of Net Assessment, Office of the Secretary of Defense
- Mr. Dan Ingold, Principle, Powersmith Energy Consulting
- Dr. Mark C. Gentry,
 Supervisor of Arctic Technology and Metocean,
 ExxonMobil Upstream Company
- Dr. Pablo Clemente-Colon, Chief Scientist of the National Ice Center (NIC), NOAA

This educated strategic discussion of forecasted Coast Guard mission change will focus on where our nation's Guardians might find themselves over the next 20 years. An interactive panel discussion of where the service is going and the policies and developmental technologies to get us there.

5:30 p.m. - 7:00 p.m.

Reception featuring a performance by the U.S. Coast Guard Honor Guard Silent Drill Team. Pre-function Area Virginia Beach Convention Center

Thursday, November 19, 2009

7:00 a.m. - 12:00 p.m.

USCG Innovation Expo Attendee Registration Check-in (continues) Visit Exhibit Only Day Pre-function Area Virginia Beach Convention Center

7:00 a.m. - 8:00 a.m.

Continental Breakfast Ballroom Pre-function Area Virginia Beach Convention Center

8:00 a.m. - 12:30 p.m.

Expo Floor opens Exhibit Halls A, B, & C

Virginia Beach Convention Center

Thursday, November 19, 2009 (cont.)

10:00 a.m. - 10:30 a.m.

Coffee Break

Exhibit Halls A, B & C

Virginia Beach Convention Center

10:30 a.m. - 11:30 p.m.

USCG Innovation Award Presentations Ballroom 1, 2 & 3 Virginia Beach Convention Center

Introductions:

 VADM David P. Pekoske, USCG Vice-Commandant United States Coast Guard

Presenter:

 ADM Thad M. Allen, USCG Commandant United States Coast Guard

- Substitution
 USCG "Captain Niels P. Thomsen Innovation Award" Presentation
- Substitution With the Substitution Award Presentation

USCG Innovation Expo Closing Ceremony
Ballroom 1, 2 & 3
Virginia Beach Convention Center

- Closing Remarks by ADM Thad M. Allen, USCG
- Colors (Revolutionary Honor Guard)

2009 USCG Innovation Expo Adjourns

Exhibit Floor Closes. Exhibitor Move-Out

11:30 a.m. - 12:00 p.m.

12:30 p.m.

12:30 p.m. - 7:00 p.m.



IPM 2009

21st Annual International Integrated Program Management Conference

"Putting the PM Back into the Process"

November 2 - 4, 2009 Alexandria, VA





Mastering Business Development Workshop





"...acquire the knowledge, thinking, skills and discipline for proactive Business Development..."

November 3 - 4, 2009 Herndon, VA





Aircraft Survivability Symposium (Secret / US Only)



"Next Generation Requirements"

November 3 - 6, 2009 Monterey, CA





USCG Innovation EXPO



"Innovation Inside – Opportunities Amidst Change"

November 16 - 19, 2009 Virginia Beach, VA





14th Annual Expeditionary Warfare Conference



"Expeditionary Warfare in a Complex Joint Operating Environment"

November 16 - 19, 2009 Panama City, FL





9th Annual CMMI Technology Conference



November 16 - 19, 2009 Denver, CO





Australian Attaché Luncheon

Featuring Air Vice-Marshal Kym Osley AM, CSC, Head Australian Defence Staff (Washington)

Discussing "The Australian Defence Force of 2030"

November 19, 2009 Washington, DC





Marine Corps System Command Small Business Opportunities Conference



November 19, 2009 Fredericksburg, VA





Interservice/Industry Training, Simulation and Education Conference (I/ITSEC)



November 30 – December 3, 2009

Orlando, FL





13th Annual Small Business Conference



"Partners for Success: Small Business & the Military"

December 2 - 3, 2009 McLean, VA





C4ISR Breakfast



December 3, 2009 Pentagon City, VA





Small Business Breakfast



"Current Trends in Mergers & Acquisitions"

December 9, 2009 Arlington, VA



Systems Engineering Division Planning Meeting

December 9 - 10, 2009 Scottsdale, AZ





Defense Systems Acquisition Management Course (DSAM)



January 11 - 15, 2010 Long Beach, CA



2010 Biometric Conference



"Matches to Missions"

January 20 - 21, 2010 Arlington, VA





Combating Terrorism Technical Support Office Advanced Planning Briefing for Industry







Mastering Business Development Workshop





"...acquire the knowledge, thinking, skills and discipline for proactive Business Development..."

February 2 – 3, 2010 Tampa, FL





C4ISR Breakfast



February 4, 2010 Pentagon City, VA





Tactical Wheeled Vehicles Conference



"TWV Strategy During Challenging Times"

February 7 - 9, 2010 Monterey, CA





Munitions Executive Summit (MES)



"The Challenge: Aligning Industrial Capabilities with Munitions Requirements and Resources"

February 8 - 10, 2010 Coronado, CA





21st Annual SO/LIC Symposium & Exhibition



"The Evolving National Strategy: The Impact on Special Operations and Its Partners"

February 9 - 11, 2010 Washington, DC





Precision Strike Winter Roundtable



February 10, 2010 Crystal City, VA



26th Annual National Test & Evaluation Conference



"Defense Test & Evaluation in a Net-Centric World"

March 1 - 4, 2010 San Diego, CA





2010 Joint Undersea Warfare Technology Spring Conference (Secret US Only)



March 8 - 11, 2009 San Diego, CA





2010 Ground Robotics Capabilities Conference & Exhibition

March 16 - 18, 2010 Miami, FL





Defense Systems Acquisition Management Course (DSAM)



March 22 - 26, 2010 Williamsburg, VA





2010 Worldwide Personnel Recovery Conference



"Diverse Threat, Unified Response"

March 29 – April 1, 2010 Arlington, VA





C4ISR Breakfast



April 1, 2010 Pentagon City, VA



Marine Corps Systems Command Advanced Planning Briefing to Industry (APBI)



April 5 - 7, 2010 Baltimore, MD





26th Annual National Logistics Conference & Exhibition

"Defense Logistics in an Era of Change: Strategically Focused, Operationally Engaged, and Committed to Professional Development"

> April 12 - 15, 2010 Miami, FL





11th Annual Science & Engineering Technology Conference & DoD Tech Exhibition



"Enabling Technologies to Fight Current & Future Conflicts"

April 13 – 15, 2010 Charleston, SC





Global Explosive Ordnance Disposal Conference & Exhibition



"Combating Terrorists Use of Explosives"

April 27 – 30, 2010 Fort Walton Beach, FL



U.S. Coast Guard Innovation EXPO

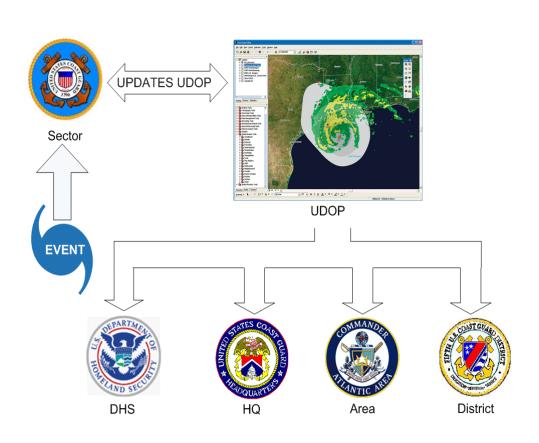
Industry Thought Leaders: How Industry Brings Experience, Engineering and Expertise to the Table

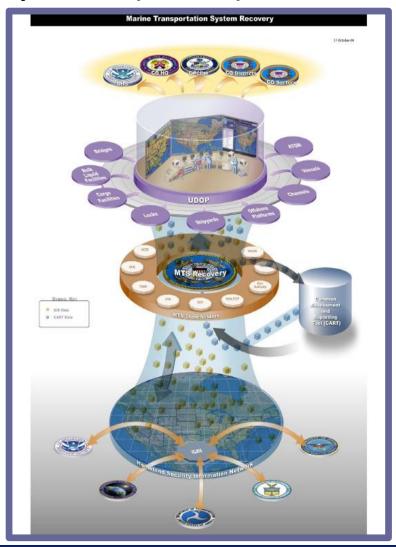
November, 17, 2009

Coast Guard Challenges/Opportunities

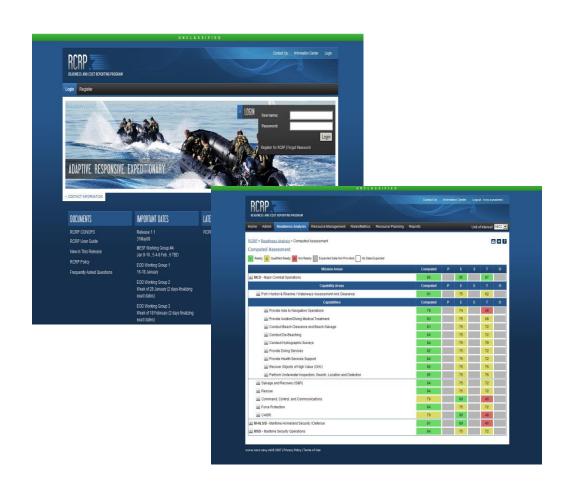
- Achieve Awareness in the Maritime Domain -CART
- Meeting growing demand in a Resource Constrained Environment – RCRP
- Information Dominance CYBER Capability
- Integrated Coast Guard Capabilities Mission Engineering

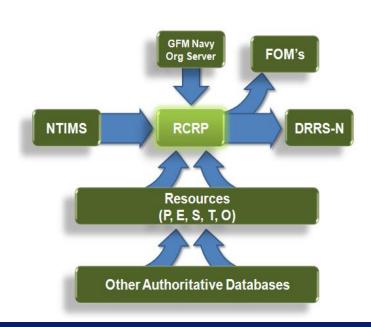
Marine Transportation System (MTS) Common Assessment Recovery Tool (CART)



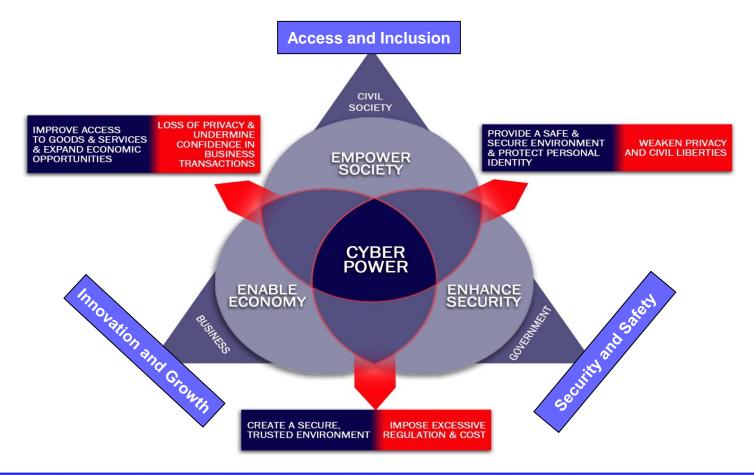


Readiness Cost/Capability Report Process





Integrated Approach for Securing Cyberspace



Understanding and addressing these key tension is key to realizing the full benefits of cyber while managing the risks

Mission Engineering

Mission Engineering's iterative analysis focuses on Capturing, Analyzing, Cataloging, Communicating, and Refining Program Needs

Mission Engineering

Iterative Analysis

Phase 1

Community Analysis

Phase 2

Operations
Analysis

Phase 3

Systems Analysis

Community Analysis

determines the major stakeholders, customers, information transactions, and applications supporting the organization's core mission

Operations Analysis

defines the scope of business activities, how they map to current applications, and how they should align to future systems

Systems Analysis maps data and applications to business functions resulting in clearly defined requirements that support an organization's operating needs



























CGCIS Support to the Coast Guard Innovation Expo 2009

Presented By:
LCDR Alan Tubb
USCG Counterintelligence Service (CGCIS)
MIFC LANT



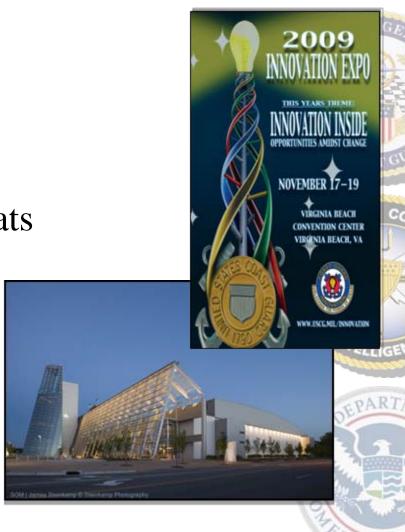






Agenda

- Security
- ▶ CI Service
- ▶ Intelligence Collection Threats
- ▶ SELC/Expo Targeting
- **▶** Elicitation
- ▶ Recent Incidents





Pertinent Security Information

- ▶ Crime rate in the vicinity of the Virginia Beach Convention Center
- **▶** Criminal activity lower in the off season
- ▶ 1900-2100 section of Atlantic Ave, also known as: "The Block"
- ➤ The Southeast Virginia (Hampton Roads) area is densely populated with activities of high interest to a range of Foreign Intelligence services to include:
 - -DoD Commands & Capabilities (USJFCOM, Langley AFB)
 - Strategic Government Agencies (NSA, DOE)
 - Atlantic Area Command
 - Maritime Fusion Center





USCG Counterintelligence Overview

Coast Guard Counterintelligence Service

▶ Mission

Preserve the operational integrity of the Coast Guard by shielding its operations, personnel, systems, facilities, and information from:

- -Foreign Intelligence and Security Services (FISS)
- -Intelligence efforts of terrorist organizations, drug trafficking elements and other organized crime groups, or adversaries

Support the identification, understanding, neutralization, and exploitation of the operations of FISS and of non-state actors that employ intelligence tradecraft



Why Target Exhibitions?

▶ Exhibitions and symposiums provide non-intrusive venues for foreign state agents to <u>identify</u> and <u>develop</u> information on areas of potential national interest



These areas of interest may be subsequently <u>targeted</u> by foreign intelligence services for in-depth intelligence collection





Keep In Mind...

"An exhibition is a battlefield for the GRU. It is also a field from which the GRU can gather a rich harvest. In the last half century, there has not been a single exhibition on our little planet which the GRU has not attended"

Former GRU Officer





Intelligence Collection Threats

- ▶ Foreign nationals with suspicious ties will be present
- ▶ + 108 countries known to spy on US, targeting technology
- **▶** Agents include: businessmen, scientists, students, academics, and engineers
- **▶** SELC/EXPO Two Types of Information Specifically Targeted:
 - **▶** USCG Personnel: Spotting & assessiong
 - ▶ Technology: emerging, military, or commercial



High interest technologies: <u>IT Systems</u>, <u>Aeronautics</u>, <u>Optics & Lasers</u>, & <u>Positioning/Navigation Systems</u>

-"Annual Report to Congress on Foreign Economic Collection and Industrial Espionage, FY2008", ONCIX



Why Target the CG SELC/Expo?

- ▶ USCG members with access to sensitive information
- ▶ USCG equipment and capabilities
- ▶ Access to other USG Departments and Agencies



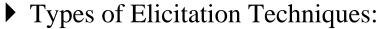


Because of our missions, access to national defense information, and level of foreign engagement/global presence, the CG is a target for foreign intelligence activities.



Elicitation Techniques

- ▶ Purposes of Elicitation:
 - ▶ Gain Information
 - ▶ Determine USCG Member's:
 - Knowledge regarding information of interest
 - Inclination to discuss topics of interest
 - Willingness to continue dialogue AFTER the Expo



Direct questioning

Word repetition

Language barrier

Leading questions

False statements

Naiveté









Elicitation Countermeasures

- ▶ Do not engage in conversation alone
- ▶ Redirect the conversation
- ▶ Excuse yourself from the conversation
- ▶ Provide vague or hypothetical responses
- ▶ Ask "Why?"









Best Practices

- ▶ Avoid potentially compromising situations
- ▶ Practice good security measures
- ▶ Think about your responses before you provide them
- ▶ Don't unnecessarily share information
- ▶ Minimize personal vulnerabilities
- ▶ Report all suspicious incidents and foreign contacts <u>immediately</u>







Recent Incidents

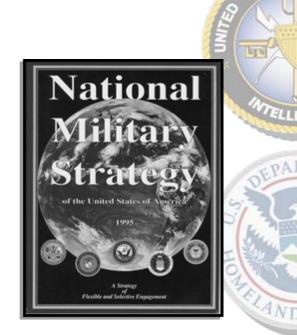
Stewart Nozette:

- ▶ Attempted spying for Israel 03 September 2009-19 October 2009
- ▶ Charges: attempted espionage for efforts to communicate, deliver, and transmit information related to military <u>spacecraft</u>, satellites and other major <u>weapons</u> systems



James Wilbur Fondren

- ▶ March 1999-February 2008: convicted of unlawfully communicating classified information to an agent of a foreign government
- ▶ Additionally sold <u>sensitive</u>, <u>but UNCLASS</u> publications relating to military strategy to a naturalized U.S. citizen with known ties to PRC officials





Adversaries' Ultimate Objective

▶ Identify a USCG member with access to information of interest

▶ Establish a relationship with the USCG member based on mutual professional interest or some incentive offered

Gain an agreement during and/or after the Expo to continue contact or

Contact the member in the future in an unsolicited manner using the bona fides of having met at the EXPO



Situational Awareness

- ▶ Take note of any individual who:
 - ▶ Appears to be probing to determine your knowledge regarding a given issue
 - ▶ Attempts to acquire personal information
 - ▶ Attempts to establish a relationship without sound pretext
 - ▶ Offers to provide a flash drive as a gift or a means to provide data
 - ▶ Exhibits suspicious behaviors







Questions?

We are interested in...
...who is interested

We are interested in...
...what they are interested in

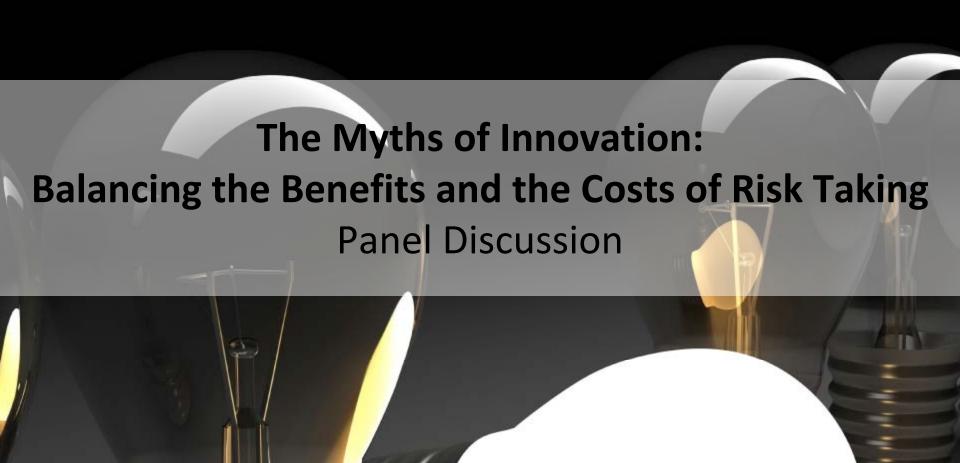


Onsight Contact: Mr. Tom Wagner: (617) 306-8765 Alternative Onsight Contact: LCDR Al Tubb (757) 373-2001

LANTAREA CISO: Mr. John Gibbons: (C) (757)739-8916 (W) (757) 398- 6318









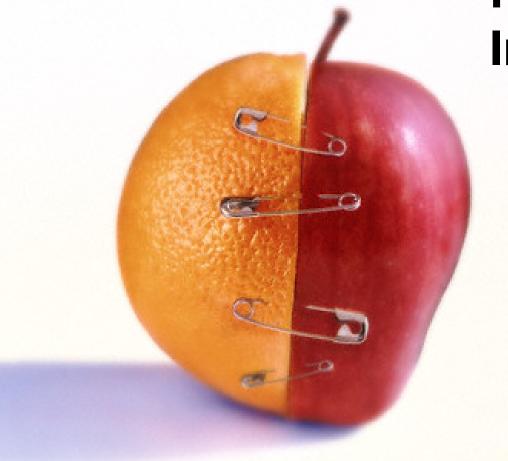
Lisa Bodell
CEO, FutureThink
getfuturethink.com
futurethinkinstitute.com













Timothy R. Girton Technical Director USCG Research & Development Center



Who We Are



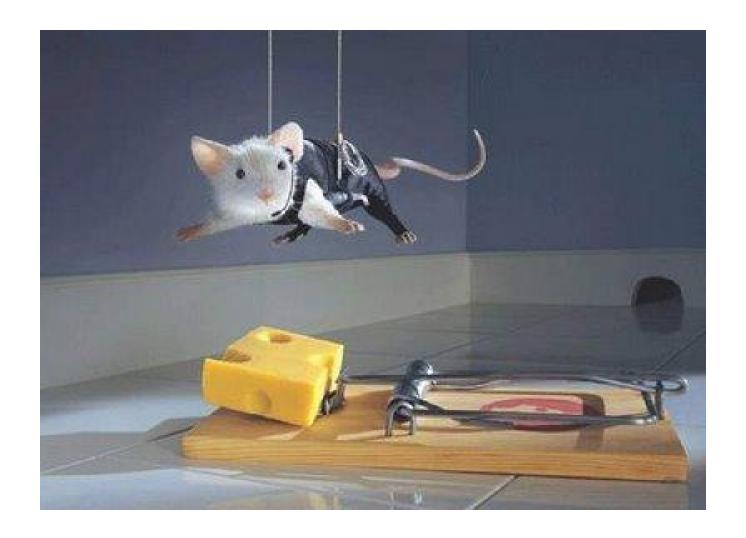


What We Do





Why We Are Innovative





Bill Wing President, WING Inflatables www.wing.com



Who We Are





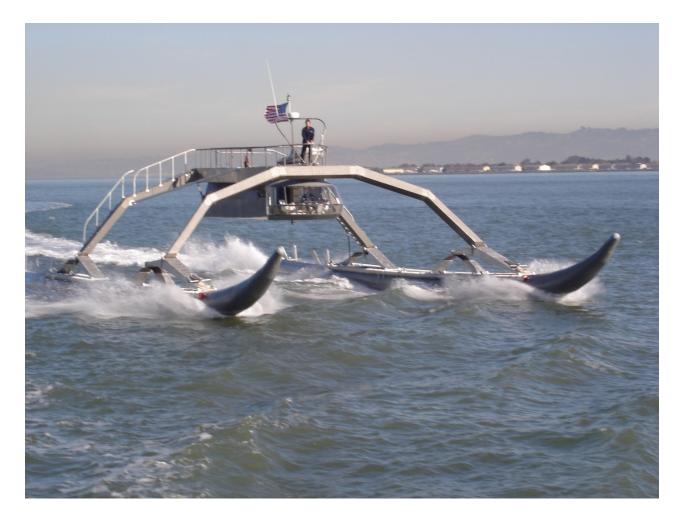


What We Do





Why We are Innovative





Edistein Institute

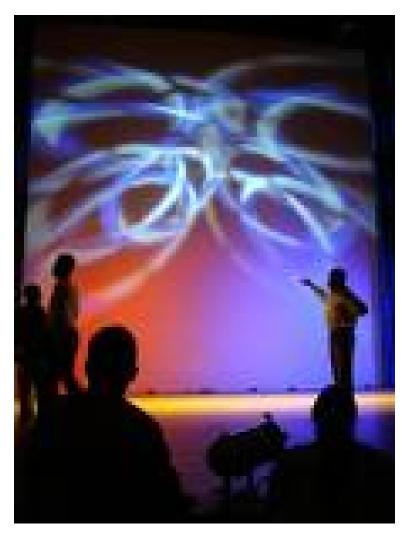
Edwin R. Addison, PhD, MBA

Edistein Institute

ed@addison.us.com



Who we are



Edistein Institute



What we do





Why we are innovative





Coast Guard R&D Center Project Benefit vs Risk

Knowledge for Mission Enhancement and Sustainment

CG Innovation Exposition | 17 November 2009



RDC Mission/Vision



Mission

A Coast Guard resource for scientific knowledge and capabilities providing innovative and adaptive research, development, testing, evaluation, analysis, and technology solutions for the maritime environment to enhance current and future asset acquisition and mission execution.

Vision

- Leverage experience in CG programs & operations
- Certified partners in the acquisition process
- Provide decision-making tools for CG decision makers
- Go-to organization for CG operational analysis & requirements generation
- Developer of new CG operational capabilities
- Active partners leveraging OGA investments
- R&D contracting center of excellence
- Organic resource to conduct independent, 3rd party analysis



Project Risk vs Mitigations

- Project Execution Risks
 - Finding the Real Problem
 - Technology
- Technology Maturity
- CG Implementation

Mitigation

- Work with Customers
- Understand Technology
- Work with Customers

RDC is link between technology and CG Operations



Mounted Automatic Weapon (MAW) Alternatives Analysis

Risks

- Safety
- Image
- Operational Effectiveness

Mitigations

- Leverage Others
- Understand Mission
- Work with Customers



Unmanned Aerial Systems

Risks

- Untried Technology
- CG Implementation
- Non-Technology Issues

Mitigations

- Project Planning
- Technology Demonstrations
- Work with Customers









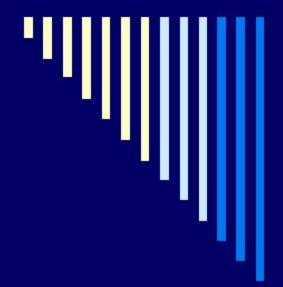












Edistein Institute

Ed Addison



Ed Addison

- Adjunct Professor, Johns Hopkins
- Serial Entrepreneur
- Partner, Edistein Institute
- □ PhD Computer Science, MBA



Edistein Affiliations

- Johns Hopkins University
- University of Pennsylvania
- Foreign Policy Research Institute



What We Offer

- Coaching, Training, Consulting
- How to Implement a Management Structure that Fosters Innovation
- Clients are Government contractors, private organizations, universities



Contact Information

- Edwin R. Addison, PhD, MBA
- □ ed@addison.us.com
- 910-398-1200







Delivering a New Asset to the Coast Guard

Innovation Expo, November 2009

* * * * * * * * *

START OF THE START

The Steps to Acquire an Asset



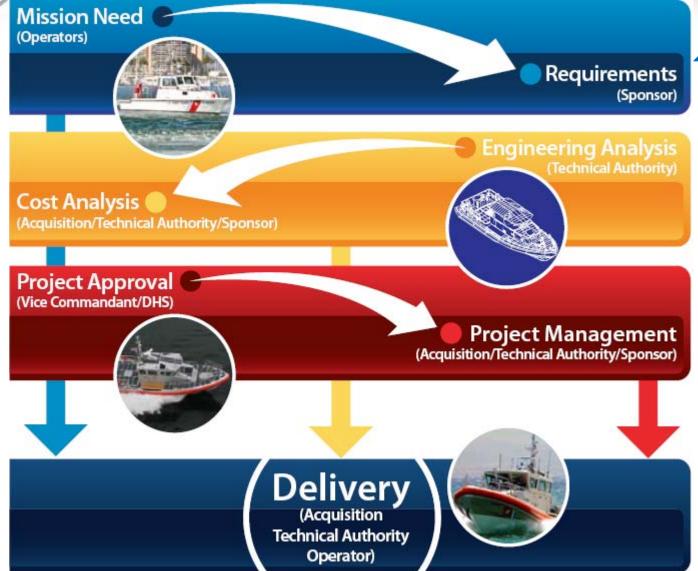
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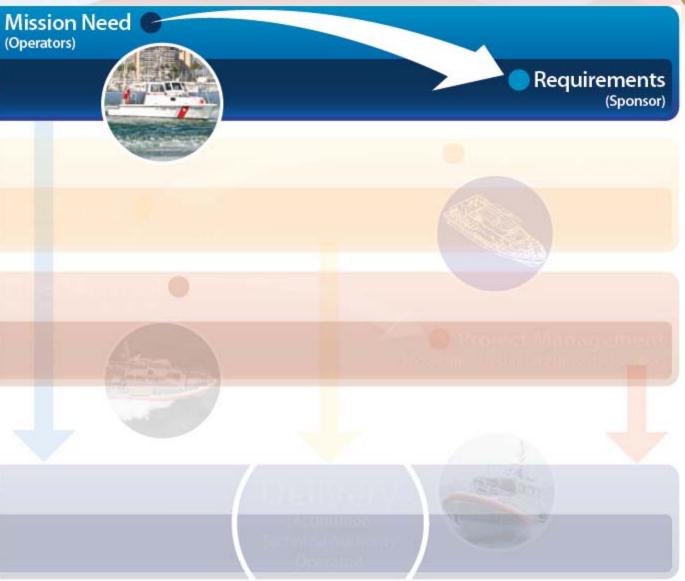
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The Steps to Acquire an Asset





The Mission Need





Response Boat - Medium (RB-M) Project Example

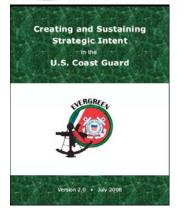
Rather than replacing boats, or even fleets, on a one for one basis, the capabilities, structure and citing of the required shore-based response boat force has been identified through data analysis and coordinated with operational commanders.

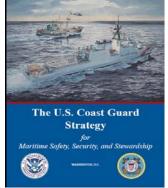


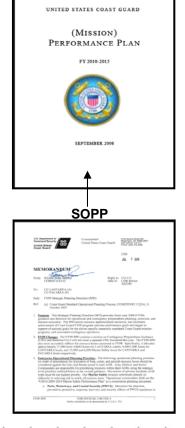


Strategy —> Budget —> Mission Execution















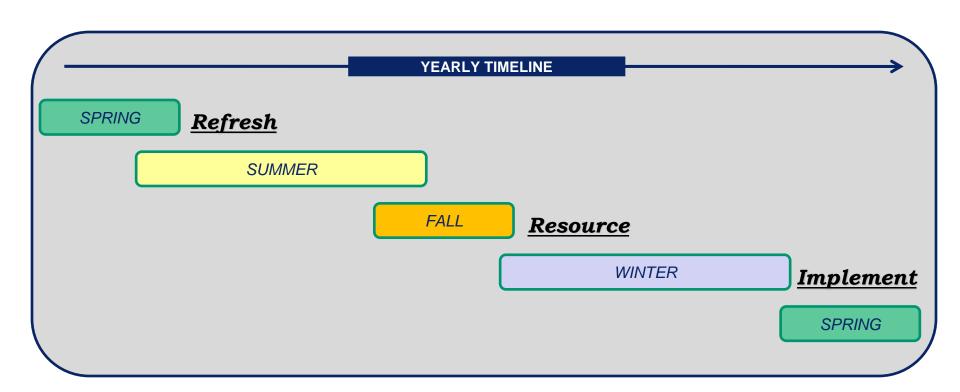
Strategy —> Budget —> Mission Execution

* * * * * * * * *



11 MISSIONS, 1 PLAN, 1 BUDGET

DCO MANAGEMENT & BUDGET PROCESS

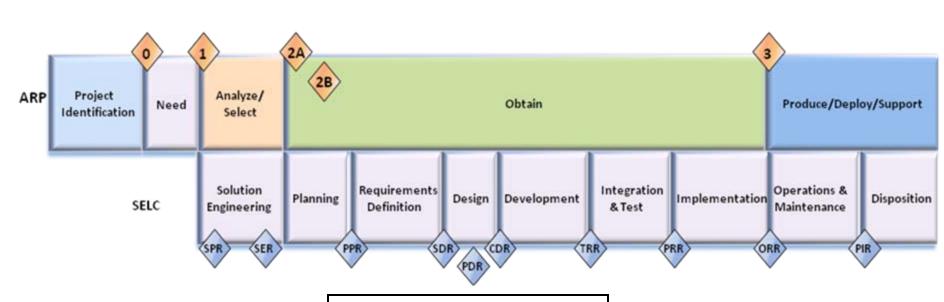




MSAM Phases



MAJOR SYSTEMS ACQUISITION MANUAL (MSAM) PHASES



ARP- Acquisition Review Process SELC- Systems Engineering Life Cycle

CDR- Critical Design Review

Sponsor Representative's Function



- Responsible for requirements generation and management
- Prepares and/or supports the following products:
 - Mission Analysis Reports
 - Mission Needs Statement
 - Concept of Operations
 - Operational Requirements Document
- Operational Test and Evaluation (OT&E)
- Develop Tactics Policy

Response Boat - Medium (RB-M) Project Example

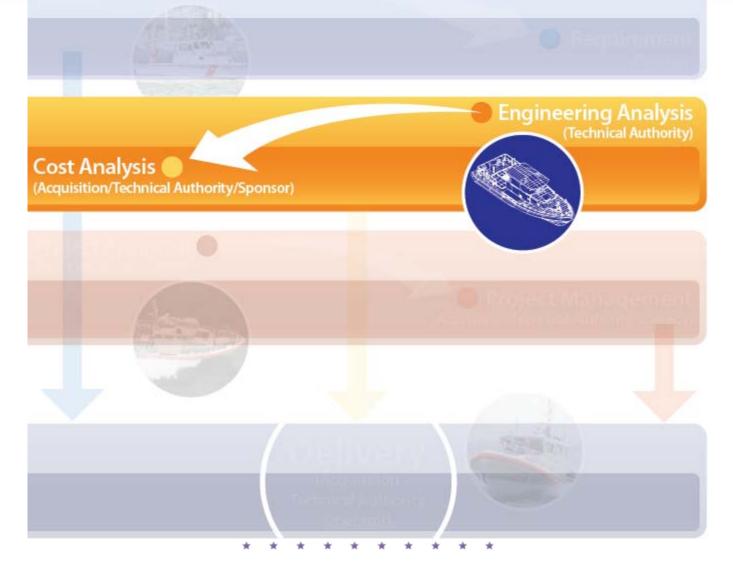
The RB-M project has focused on incorporating the input from the operational commanders into developing a more capable platform. The requirements developed from this input has greatly influenced the design.





The Steps to Acquire an Asset







Technical Authority Functions



- Examine new technology
- Asset Project Office (APO)
- CG-LIMS Logistics Management Systems
- Collect maintainer input

- Life-cycle Planning (Integrated Logistics Support Plan
- Market Research
- Engineering Analysis (Feasibility)
- Engineering Change Proposals (ECP)

Response Boat - Medium (RB-M) Project Example

Technological and design features will improve search object tracking, water recovery efforts, crew comfort, and maneuvering/intercept capabilities for defense operations. With the latest developments in integrated navigation and radiotelephony, command and control will be greatly enhanced, as will crew safety.





Market Research



Who is responsible for Market Research and why?

- Conducted by everyone involved in acquisition
- Identify opportunities for use of commercial products or services to meet defense needs
- Access to latest technology -- state-of-the-market technology integrated into systems and assets
- Reduce costs
- Reduce acquisition time
- Write specifications and SOWs to allow companies to offer commercial items and services



The Steps to Acquire an Asset







Develop an Acquisition Strategy



- How will you develop the item (COTS, NDI, New Design Development)?
- How will you contract for the item (Cost vs Fixed Price, Fee Structure)?
- How will you test the item (Contractor approved, Government, or develop new test procedures)?
- How will you produce the item (is it viable to have multiple vendors and/or solutions?)?
- How will you field the item (Which unit, how many items, when needed)?

Response Boat - Medium (RB-M) Project Example

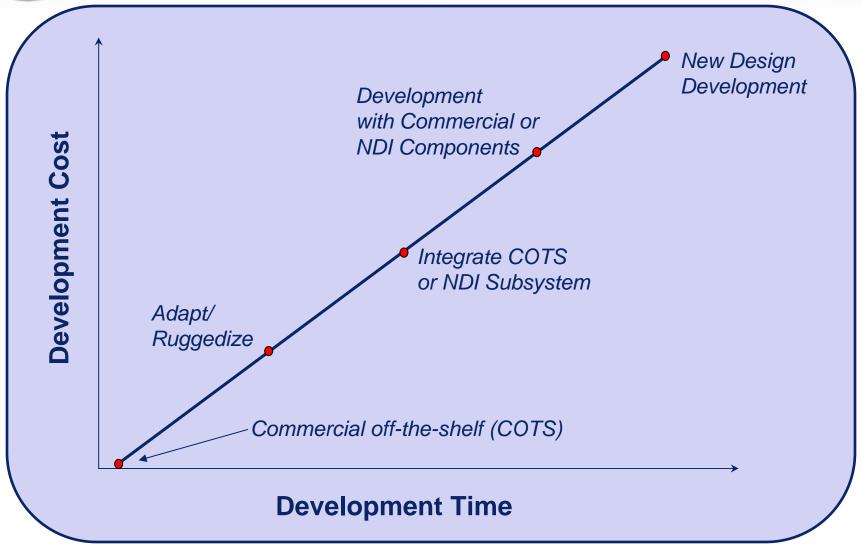
The RB-M is designed to use existing facilities and minimize the learning curve to ensure a quick and smooth transition. Life cycle support is part of the design - not just parts support, but all logistics, including training, maintenance, repair, and future upgrades.





Cost/Schedule/Performance Tradeoffs







Determining the Type of Specifications for a Contract



Detailed Specifications

- Contains design solutions
- How requirements are to be achieved
- How an item is to be fabricated
- How an item is to be constructed

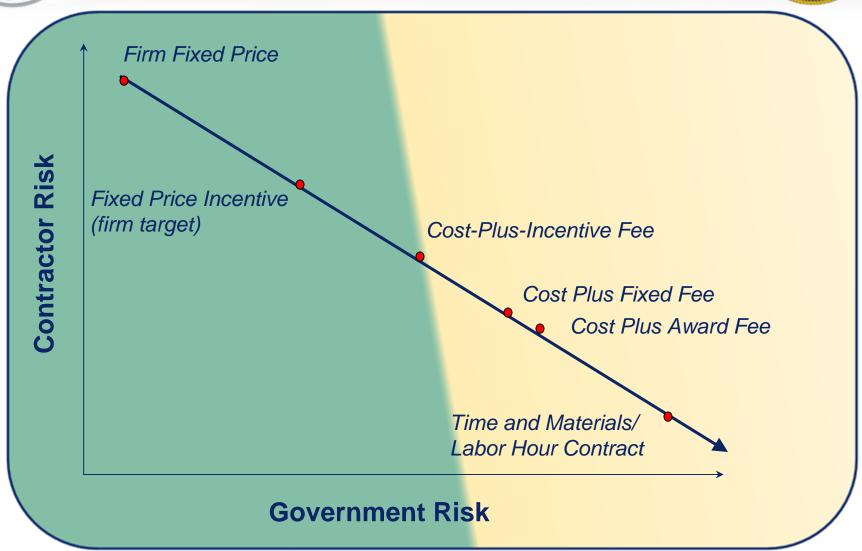
Performance Specifications

- Defines function of item
- Environment in which it must operate
- Interface/Interchangeability requirements
- Criteria for verifying performance



Contract Type Balances Risk







Contract Award- What's Next?



Managing a Protest (Don't be surprised)

 Good Contract Administration is critical to Program Success!



Project Approval



- DHS approval
- Congressional authorization
- Resources identified and budget determined by Congress
- USCG (through DHS) allocates the resources

Response Boat - Medium (RB-M) Project Example

January 2000 - Shore-based Response Boat System Capability Replacement Major Acquisition Project Charter is authorized.





Project Management



- Project Management- Proactively paying attention to cost, schedule, and performance
- Understanding and preparing for the major decision points using the MSAM
- DHS is the Milestone Decision Authority for major acquisitions
- Involving the Sponsor and Technical Authorities every step of the way
- Using third party assessments to improve information for decision makers
- Leveraging partnerships within DHS and DoD
- Credentialed acquisition professionals

Response Boat - Medium (RB-M) Project Example

The RB-M Acquisition Project is a two-phased procurement to quickly acquire and field an operationally effective and suitable craft to meet Coast Guard needs. The acquisition strategy takes advantage of the growing technology and maturing global design base for marine craft, and to select an effective and suitable boat.





The Steps to Acquire an Asset





(Acquisition Technical Authority Operator)





Delivery



- Training
- Sustainment Methodology in Place (Logistics)
- Warranty/ Contract support in place
- Responsive to operator (User feedback)
- CG-LIMS- Data Driven Mission Support

Response Boat - Medium (RB-M) Project Example

The key strengths of the successful RB-M project are its solid foundation of validated requirements, its use of established best practices for engineering and manufacturing, and its close relationship with the technical authority and the sponsor.

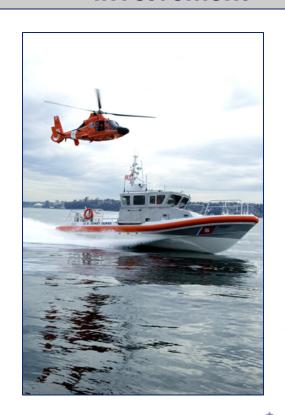


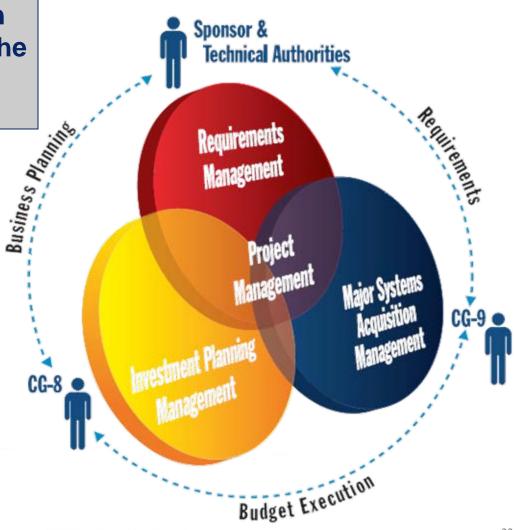


Conclusion



Acquiring and delivering an asset to the field requires the entire Coast Guard's involvement





QUESTIONS?



The Steps to Acquire an Asset



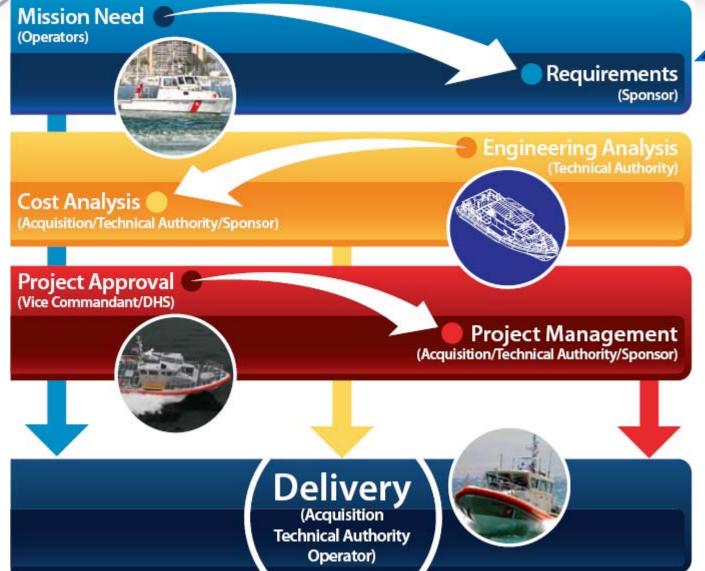
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USCG Innovation Expo

Paul F. Bill, *Deputy Director - Business Development Armament Systems BAE Systems Land & Armaments*

17 November 2009





How BAE Systems Partners for Innovation

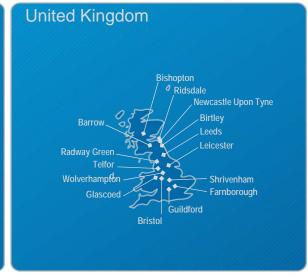
- A global footprint
 - Six home markets
 International innovation access
- Innovation Centers
 - Understanding requirements °Demonstrate solutions
 - Three EI&S IC sites operating "Nashua IC next into operation
 - Liberty Station/Charleston
- Investment in R&D
 - One of industry's highest
 - Cooperative investments





A truly Global Footprint















Germany





Innovation Centers Approach

- Maritime mission focus
- Supports capabilities development, production and integration
- Advanced technology demonstrations with interlinked networking capabilities
- Consolidated Afloat Network (CANES)
- Turning ideas into innovative application of technology to create value ... front-end
- Customer-focused demonstrations





Tools and Facilities

- Leverages existing assets to great extent
- Collaborative work environment essential
 - Physically collocated team to maximize interaction and sharing of ideas
 - Facilities tailored to support innovative thinking and collaboration
- Shared resources
 - IT resources
 - Visualization facilities
 - Hardware, Integration and Test facilities









Summary

- Innovated Approach
- Leveraging technological discoveries
- Strong niche positions in naval weapons and munitions
- Demand side thinking



Service Common Weapon









U.S. Coast Guard Innovation EXPO

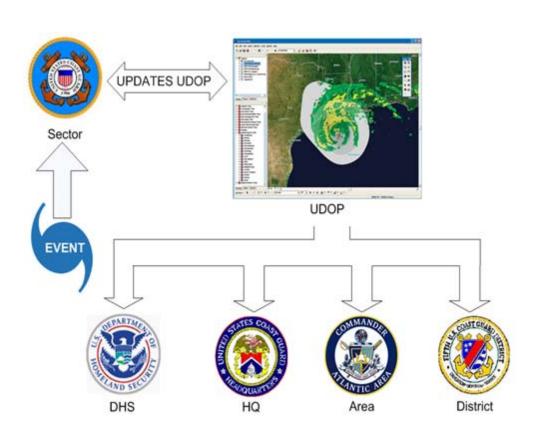
Industry Thought Leaders: How Industry Brings Experience, Engineering and Expertise to the Table

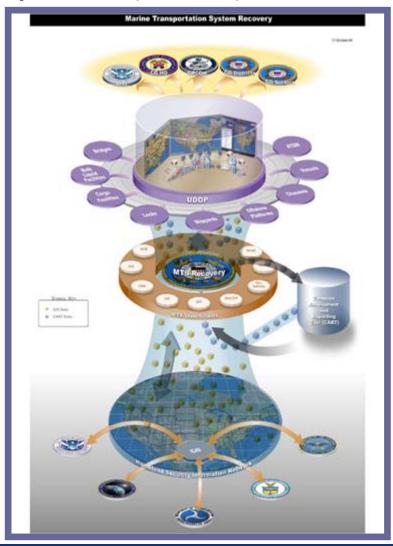
November, 17, 2009

Coast Guard Challenges/Opportunities

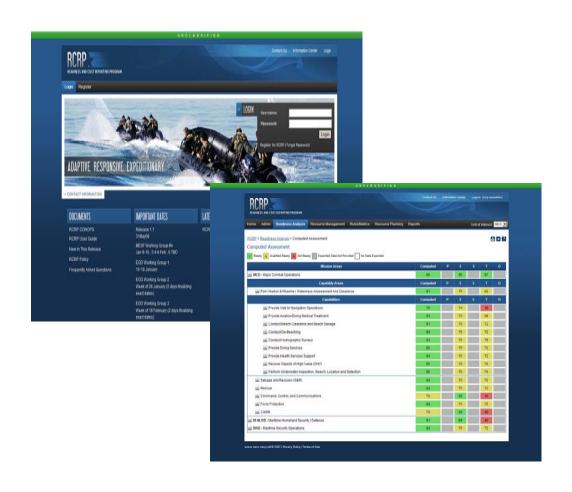
- Achieve Awareness in the Maritime Domain -CART
- Meeting growing demand in a Resource Constrained Environment – RCRP
- Information Dominance CYBER Capability
- Integrated Coast Guard Capabilities Mission Engineering

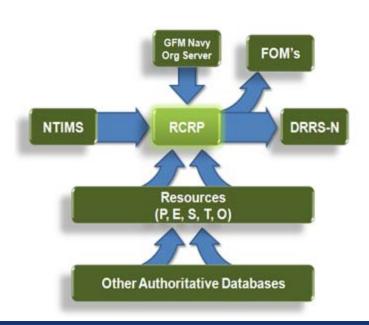
Marine Transportation System (MTS) Common Assessment Recovery Tool (CART)



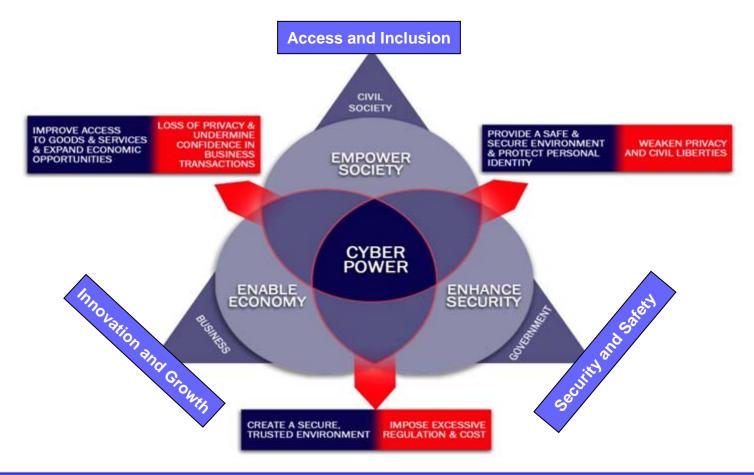


Readiness Cost/Capability Report Process





Integrated Approach for Securing Cyberspace



Understanding and addressing these key tension is key to realizing the full benefits of cyber while managing the risks

Mission Engineering

Mission Engineering's iterative analysis focuses on Capturing, Analyzing, Cataloging, Communicating, and Refining Program Needs

Mission Engineering

Iterative Analysis

Phase 1

Community Analysis

Phase 2

Operations Analysis

Phase 3

Systems Analysis

Community Analysis

determines the major stakeholders, customers, information transactions, and applications supporting the organization's core mission

Operations Analysis

defines the scope of business activities, how they map to current applications, and how they should align to future systems

Systems Analysis maps data and applications to business functions resulting in clearly defined requirements that support an organization's operating needs



U.S. Coast Guard Innovation EXPO

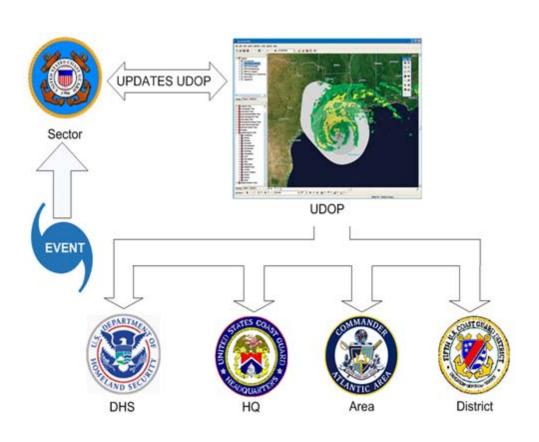
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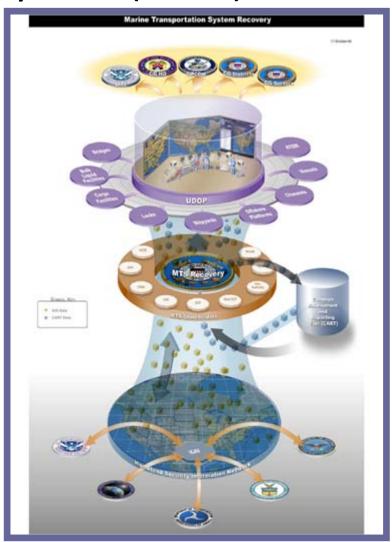
November, 17, 2009

Coast Guard Challenges/Opportunities

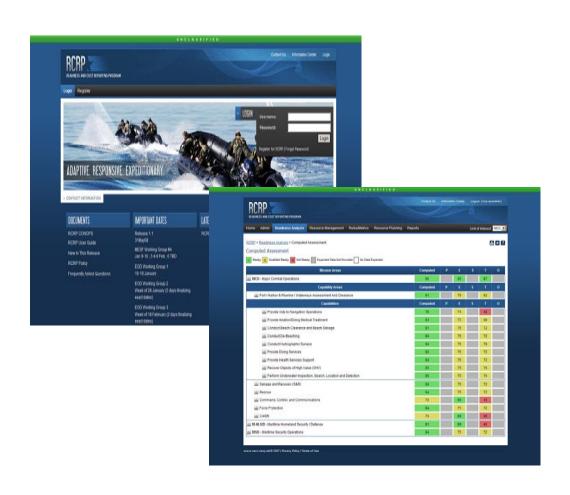
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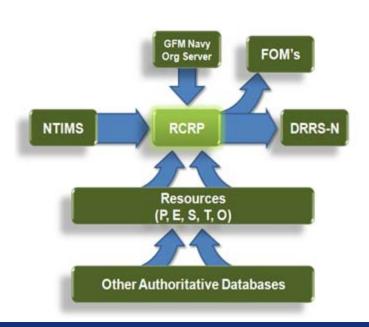
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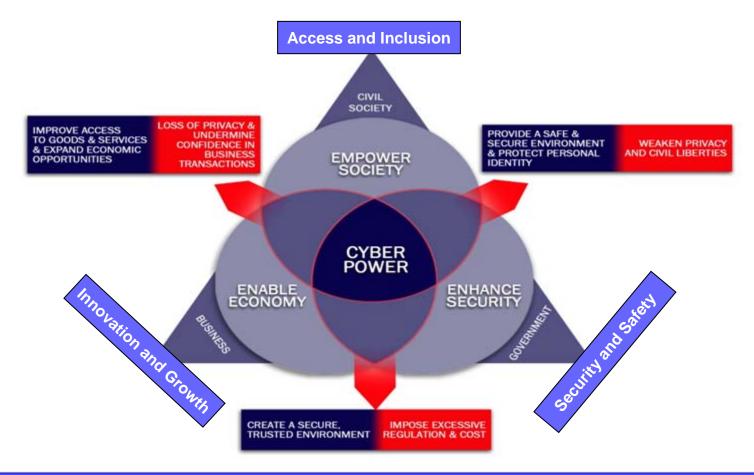


Readiness Cost/Capability Report Process





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Industry and Government Innovation

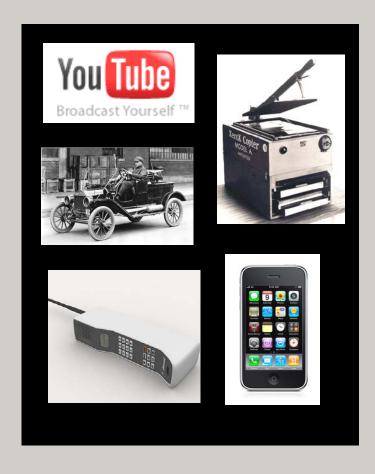
November 17, 2009

Jack Littley, DSc President and COO, Truestone



Idea-Driven Innovation





New markets and new ways of doing things. The result of:

- Breakthrough thinking
- ► Disruptive technologies

Truestone Approach

- ► Communities of interest
 - Follow key technologies
 - Map to customer needs
- ► Seek customer traction
 - White papers
 - Briefings
- ► Build implementation capacity
- ► Create innovation offerings

Problem-Driven Innovation





Tackling complex initiatives with large resource requirements:

- ▶ Broad impact
- Urgent need to solve problem

Truestone Approach

- ► Create an innovation practice area
 - Hire SMEs
 - Build partnerships
 - Create methodologies
- ► Find our niche
 - Tailor approach
 - Create solutions base
- Respond to customer demand

In-Market Innovation





Innovation in operational environments

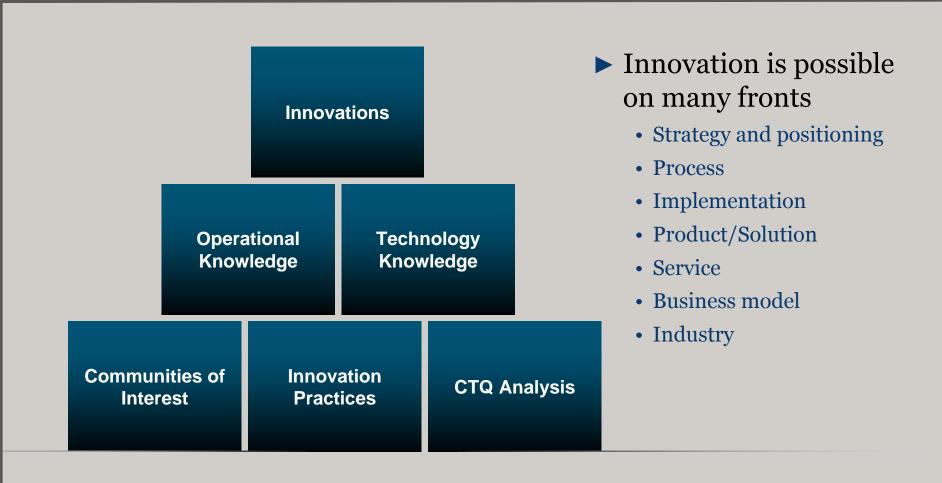
- Combine operational insight with innovative use of tools and techniques
- Develop practical innovations
- ▶ Deploy the winners on a larger scale

Truestone Approach

- ► CTQ analysis sessions
 - Identify root needs
 - Leverage operational expertise
 - Develop practical options
- ► Always focus on economics
- ► Leverage technology integration

Our Innovation Building Blocks







13873 Park Center Road, Suite 300N Herndon, VA 20171 703.766.6900 | www.truestonefed.com







Coast Guard Industry Innovation Panel

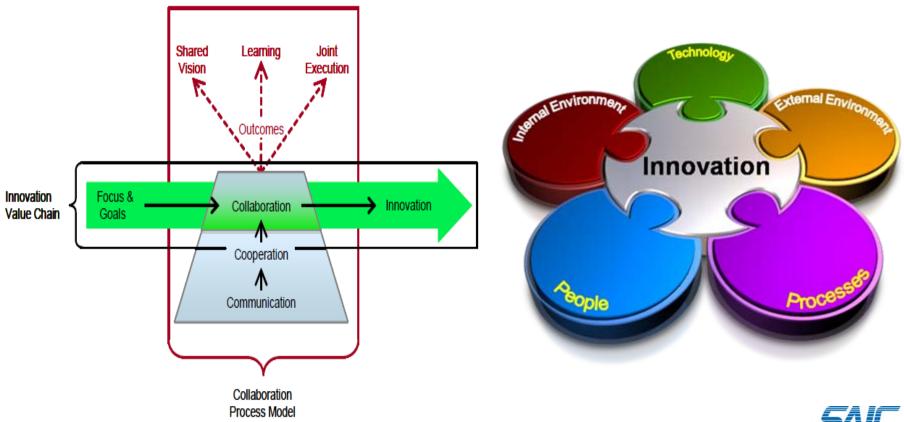


The Power of Process



SAIC Innovation Value Chain

Solutions





The Practice of Innovation





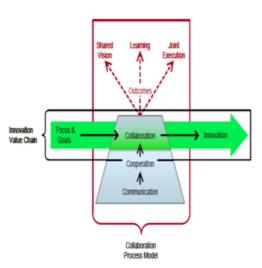
- Tsunami warning capability...International disaster alert system
- Coast Guard Biometrics at Sea Program Mona Pass Proof of Concept



Technology Innovation Focus



APPROACH



Innovation Enablers

- CMMI® Level 5
- ISO® certifications
- Engineering Edge SE&I
- Small business partnerships
- University alliances
- IR&D
- Culture
- Industry associations

SAIC Technology Focus

- Command and control
- Biometrics
- Modeling, simulation and training
- ISR enablers
- RF and optical physics
- Cryptology and cyber
- Neutron and gamma physics
- Fuel and energy sources
- Energy transmission and distribution
- Medical research
- Advanced bio and chemical sensors
- Neuroscience
- Disease surveillance
- Specialized medical knowledge

Common Driver Trainers



SOA-Based Operations Center



Integration and Interoperability Laboratory



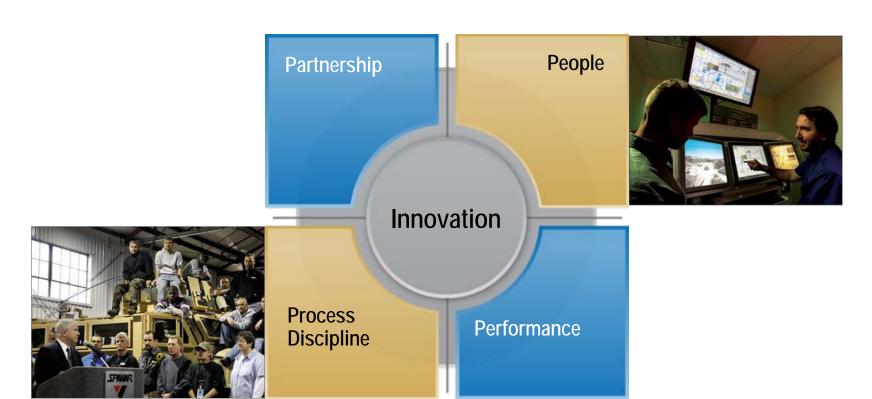


Innovation Summary



09-1844-ID-15

Innovation inside ... opportunities amidst change









GENERAL DYNAMICS C4 Systems

EDGE® Innovation Network

Bringing Experience, Engineering, and Expertise to the U.S. Coast Guard

NDIA USCG Innovation Expo

Lee Wright



What is the EDGE® Innovation Network?

A revolutionary model where industry and academia collaborate to deliver new technologies and innovative capabilities to users.

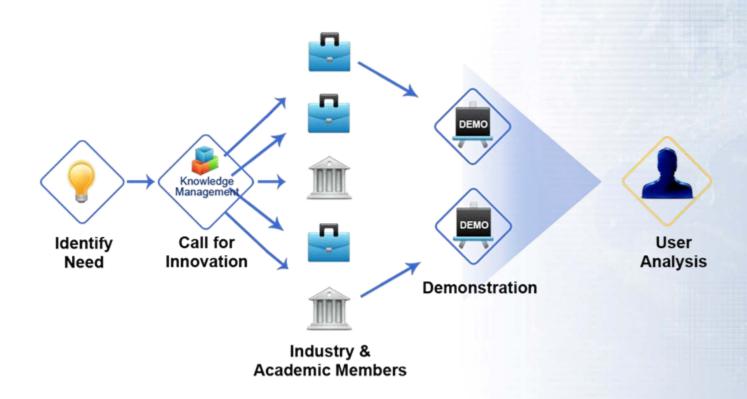
Addresses the innovation needs of:

- Military
- Federal and state governments
- Commercial and international users

Over \$200M in Research and Development from 100 industry and academic members

EDGE Innovation Network How It Works





EDGE Benefits



Links user needs to wide range of technical solutions

Quick path to solutions

- No reinventions
- "60 days to demo" goal

Access to multi-vendor technology

Collaboration between industry partners

Sharing of knowledge and solutions

Sustained Innovation

Optimizes system upgrades









Sample EDGE Projects

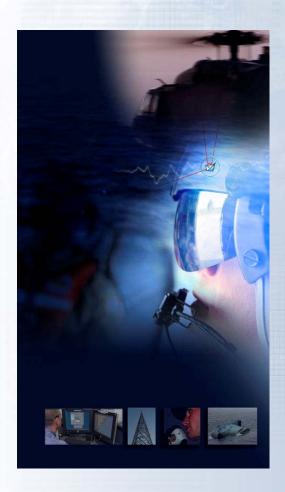
Researching New Technologies with Potential to Improve Coast Guard Operations

Speech Recognition Innovations

 With BBN, IBM, Viecore, Iris Technologies, Fonix

Transmission of Operational Data to Airborne Helicopters

With Rockwell Collins



Closing



The EDGE has completed ~50 projects to date

■ DOD, Federal Civil government

The EDGE model has proven to deliver value to all involved







The EDGE Model Provides a Compelling New Approach to Bringing Innovative Solutions to Users



Lee Wright

(480) 441-7953

Lee.Wright@gdc4s.com

http://www.edge-innovation.com





Coast Guard Modernization



Where We Are and Where We Are Heading

U.S. Coast Guard...



...Change-Centric Learning Organization

Moderator:

RDML Sandra Stosz Director of Enterprise Strategic Management and Doctrine

1



Panel Members



- DCO RDML Kevin Cook
- Future DCMS Mr. Jeffery Orner
- Future OPCOM RDML James Watson
- Financial Transformation Mr. Martin Rajk
- FORCECOM RADM Timothy Sullivan
- NAPA Mr. Jaime Zamora



Modernization Panel Agenda



- Introductions
- Modernization Overview (10 minutes)
- Modernization Effort Summaries (25 minutes)
 - Deputy Commandant for Operations (DCO)
 - Future Deputy Commandant for Mission Support (DCMS)
 - Future Operations Command (OPCOM)
 - Financial Transformation
 - Force Readiness Command (FORCECOM)
- Panel Q & A (50 minutes)
- Closing Remarks (5 minutes)

- Demand for an organization that is responsive to 21st century threats & hazards.
- Demand for an <u>operational structure</u> that is more agile, flexible, and responsive.
- Demand for improved <u>business</u> and support processes.
- <u>Lessons learned</u> from internal/external studies, GAO & Congressional reports



Outcomes of a Change-Centric Organization



- Make our support systems <u>more</u> <u>responsive</u> to our operators.
- Make our force structure <u>more</u> responsive to mission execution.
- Make our Coast Guard <u>more</u> <u>responsive</u> to our Nation.



Path to a Change-Centric Coast Guard



Visioning and Design

Phase 1

Functional Alignment

Phase 2

Process Engineering

Phase 3

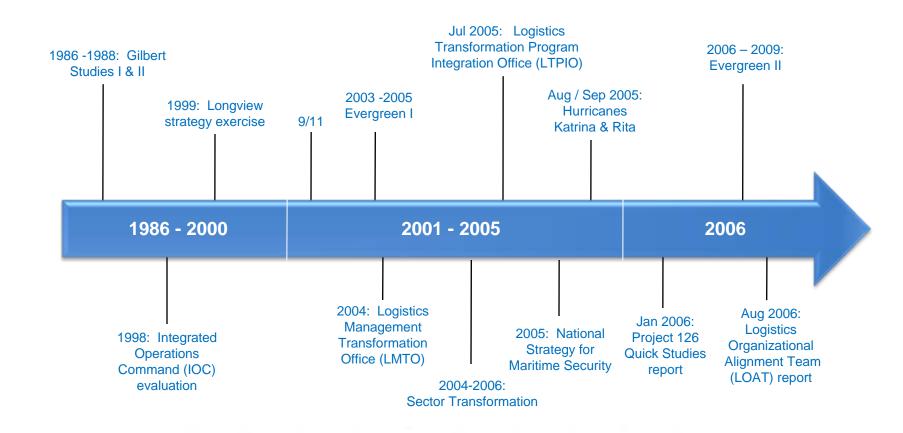
Change-Centric Organization

Phase 4



Foundations of Modernization





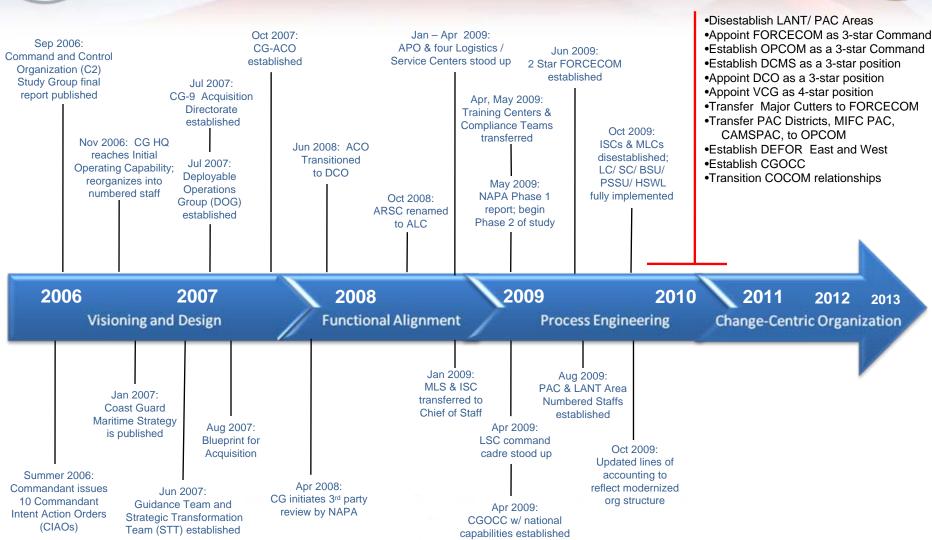
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Modernization Major Milestones



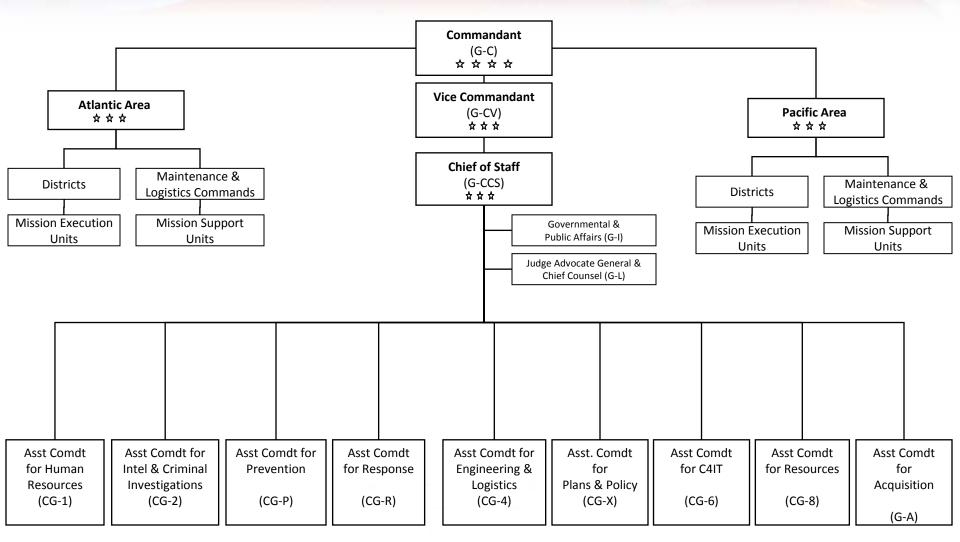
Authorization Bill Enacted (TBD)





Fundamental Design of Pre-Modernized Coast Guard

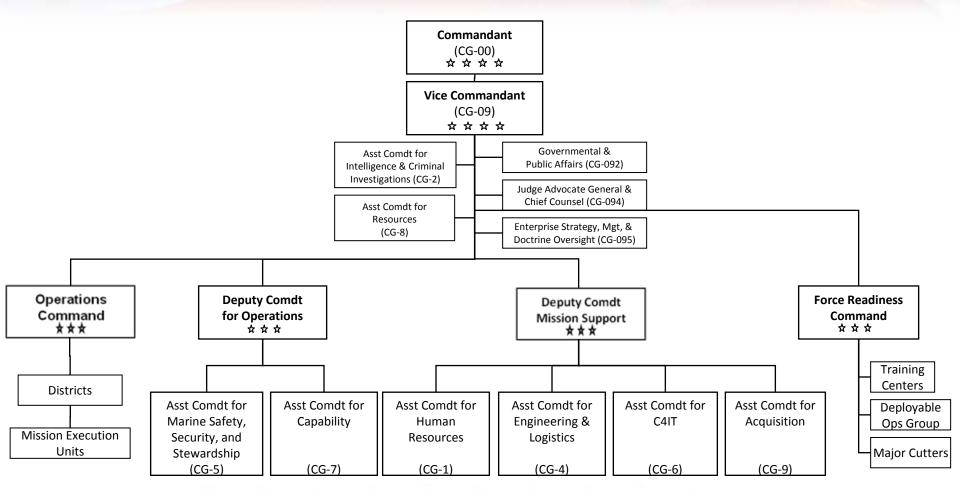


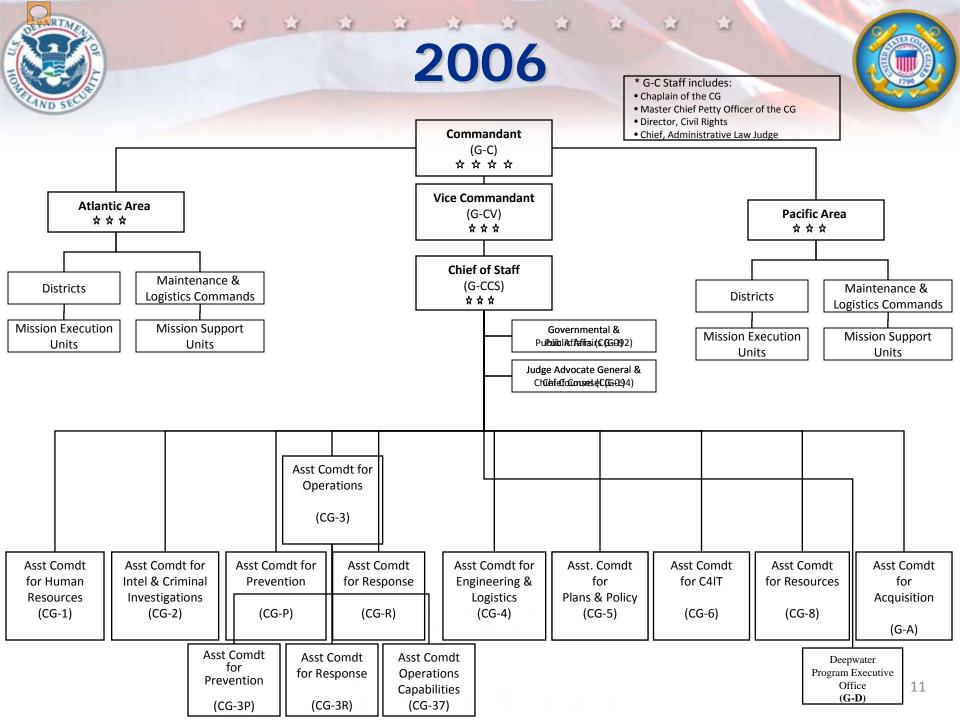




Fundamental Design of Modernized Coast Guard



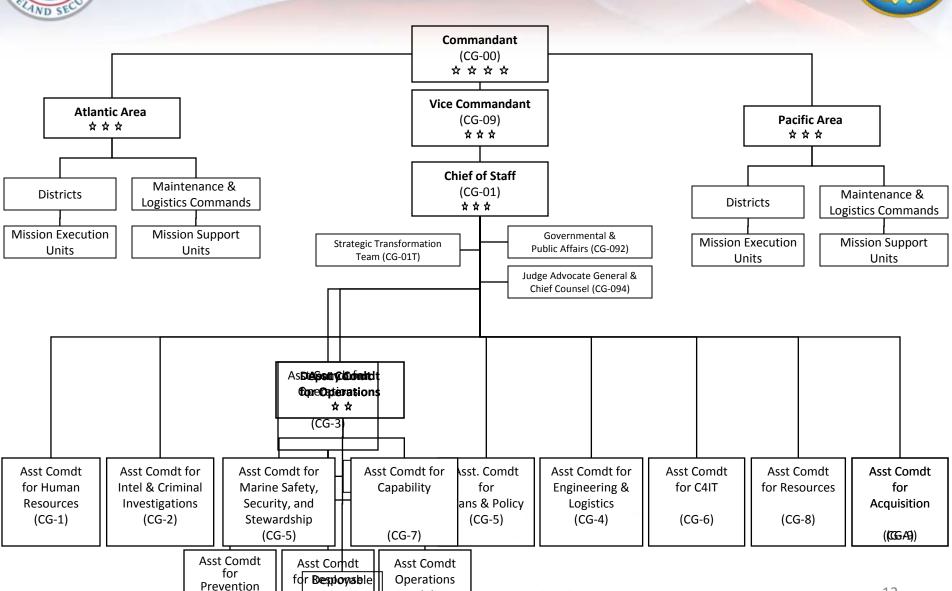






June 2007 – June 2008





Capabilities

(CG-37)

Ops Group

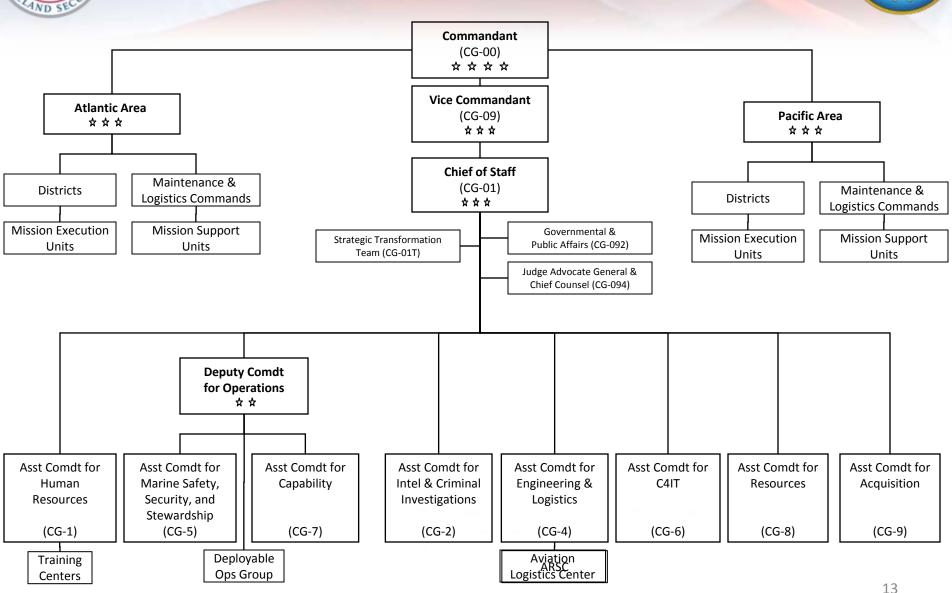
(CG-3R)

(CG-3P)



Oct - Nov 2008

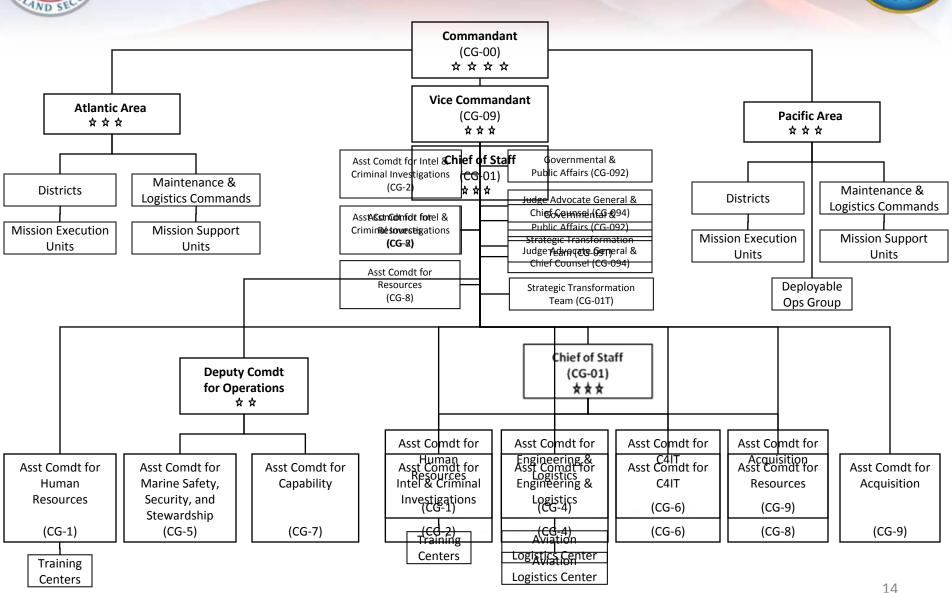






Jan 2009

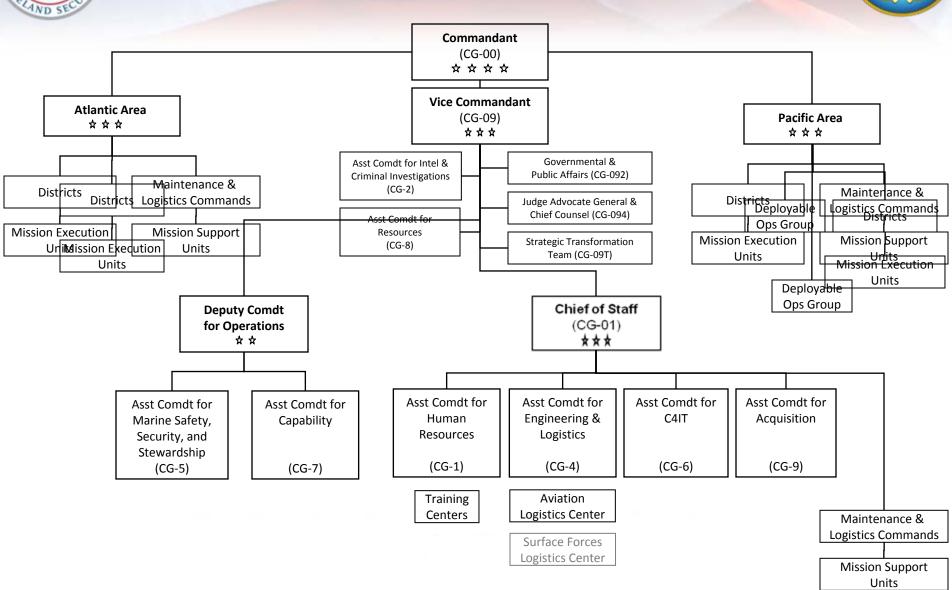






Jan 2009 continued

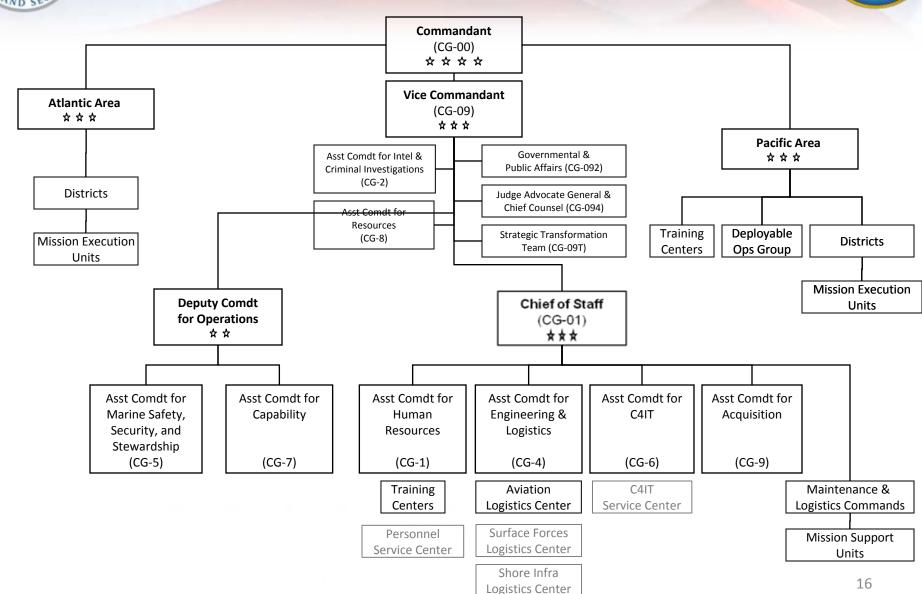






Feb - Apr 2009

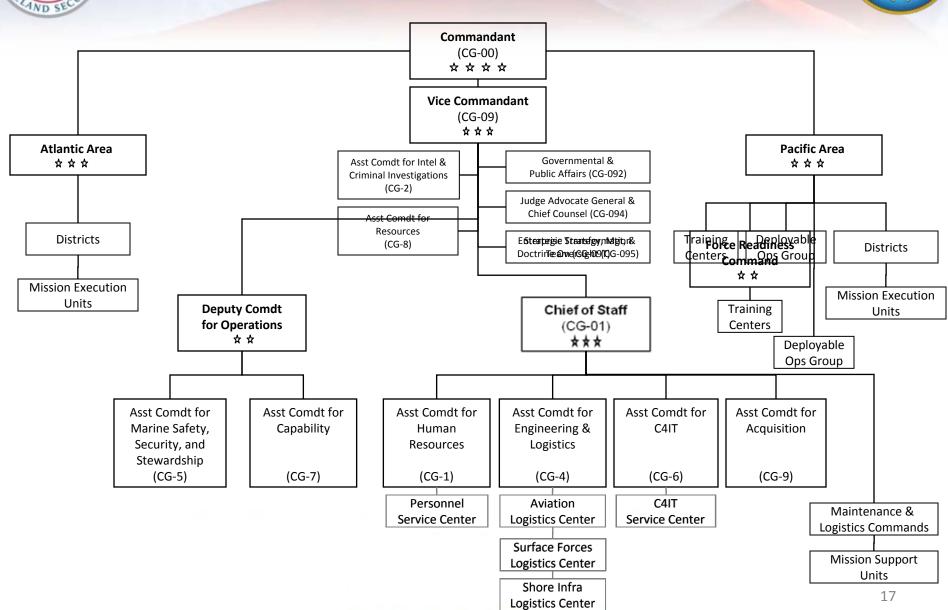


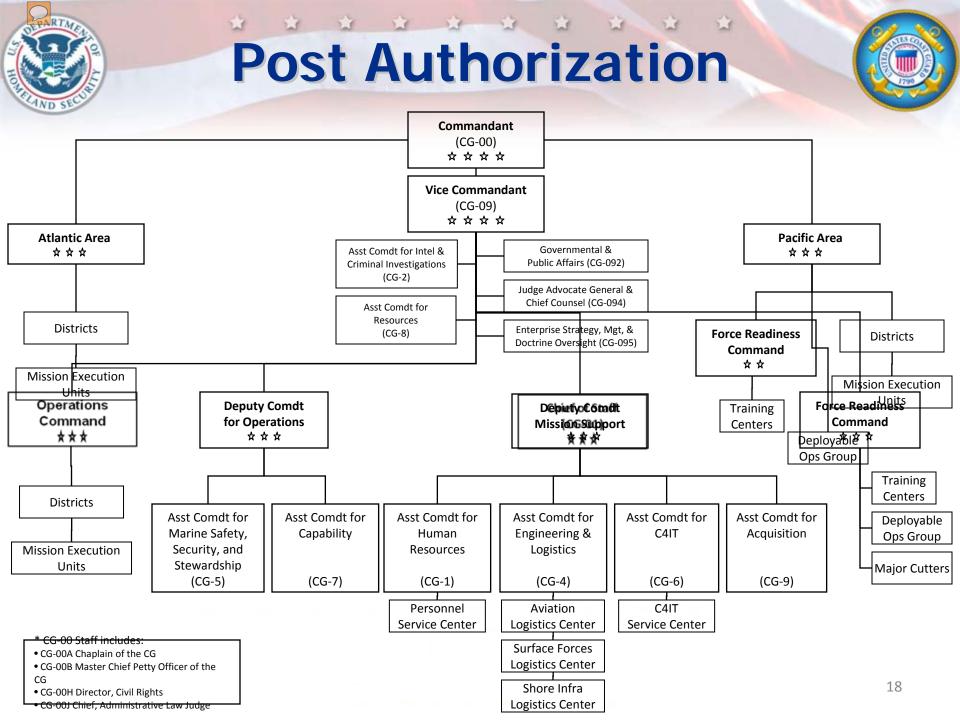




May - Nov 2009









2010, 2011, & Beyond



Process Engineering

- Align Training Teams
- Assess & Align Districts Functions
- Assess & Align Sector Logistics
- Intelligence Integration
- Capabilities Management
- Operational Training, Tactics, Procedures Development
- Implement NAPA recommendations
- Stay on course: Change-Centric Coast Guard



A Modernized Coast Guard





- Regulatory Authority by DCO
- Logistics Support by DCMS
- Incident Command System
 Training by FORCECOM
- Mission Execution & Interagency Coordination by OPCOM





DEPUTY COMMANDANT FOR OPERATIONS (CG-DCO)

Modernization Update

RDML Kevin Cook

Director of Prevention Policy

(CG-54)



DCO Mission & Vision



Mission

DCO will develop and oversee the execution of Coast Guard's strategic-level operational policy, planning, resource acquisition and international engagement.

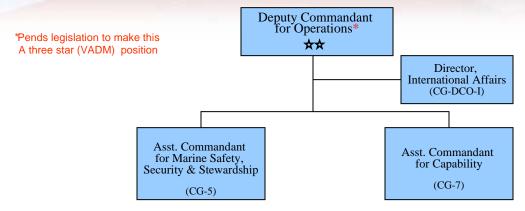
Vision

DCO will align Coast Guard's mission activities, outputs and outcomes to optimize mission execution and thus ensure that the Coast Guard remains the recognized international leader in Maritime Safety, Security and Stewardship.



Coast Guard Deputy Commandant for Operations (CG-DCO)





BENEFITS

- Consolidates all CG operating programs under single Deputy Commandant, increasing operational focus & unity of effort.
- Integrates all operational policy development under single Assistant Commandant for Marine Safety, Security and Stewardship, eliminating overlap and redundancy, and providing clear unambiguous guidance to the field.
- *Improves* capabilities requirements generation for all Coast Guard operating programs, centralizing these functions under a single Assistant Commandant for Capability.
- *Incorporates* the International Affairs Directorate and functions into the new CG-DCO organization, improving the link between operational policy and international engagement.
- Enhances Headquarters alignment with the new Sector field operations organizational structure, clarifying mission ownership and improving the flow of policy, plans and resources from Headquarters to the field.



Deputy Commandant for Operations (CG-DCO) Milestones





Pre 2004

Transitioned
G-O & G-M to
Prevention &
Response

Version 1.0;
"Integration"
CG-5 & CG-7
International Affairs

2005

Merged
MSOs &
Groups into
Sectors

2004-2006

Established CG-3; 3P, 3R, 37 "Merger"

2006

2007

DCO Version 1.2 "Divestment" 3000+ billets

2008-2009

Before

- •Multiple field units in same AOR
- Separate O and M chains of command and HQ Programs
- Mission/Policy Overlap
- •Multiple CG Spokespersons

<u>Today</u>

- One Senior Leader Directs All Operational Policy
- •Integrated & Aligned Mission Execution
- •Consistent Structure
 Throughout Entire Service

Proposed DCO Version 2.0 "Alignment"

2010



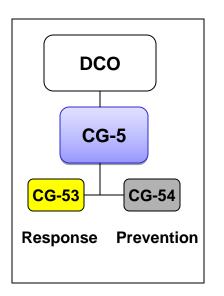
The Ops Alignment Picture

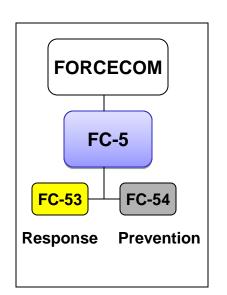


Ops Policy

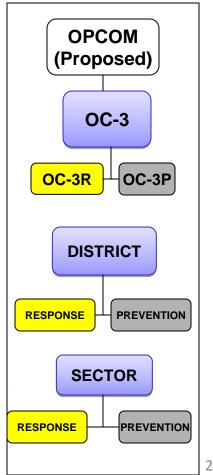
Ops Doctrine/TTP

MISSION EXECUTION





CG-5 aligns structurally with FC Doctrine and OC Mission Execution, clarifying ownership and improving the flow of policy, plans and resources to the field.



25



DCO Version 1.2





Consolidates all HQ Operating Programs under DCO, Improving Operational Focus and Unity of Effort

Centralizes Ops Resource Planning, Programming &

DIRECTOR OF

OPERATIONS RESOURCE MANAGEMENT

(DCO-R)

Budgeting, Linking Strategy to Resources

DEPUTY COMMANDANT FOR OPERATIONS (DCO)

RADM Brice O'Hara

International Affairs under DCO Improves the linkage between Policy & International Engagement

DIRECTOR OF INTERNATIONAL AFFAIRS (DCO-I)



Integrates all Ops Policy under CG-5, Eliminating overlap and Redundancy



GS-15

ASST COMMANDANT FOR MARINE SAFETY, SECURITY AND STEWARDSHIP (CG-5)



ASST COMMANDANT FOR CAPABILITY (CG-7) Centralizes and Improves Capabilities Requirements under CG-7

DIRECTOR OF ASSESSMENT, INTEGRATION AND RISK MANAGEMENT (CG-51)



DIRECTOR OF COMMERCIAL REGULATIONS AND STANDARDS (CG-52)



DIRECTOR OF RESPONSE POLICY (CG-53)



DIRECTOR OF PREVENTION POLICY (CG-54)

Completes HQ Alignment with Field Operations Structure





Future DEPUTY COMMANDANT FOR MISSION SUPPORT (CG-DCMS)

Modernization Update

Mr. Jeffery Orner

CG-4D



DCMS Mission & Vision



Mission

DCMS will enable Coast Guard Mission Execution and advance Coast Guard's Maritime Strategy by fostering a professional workforce capable of delivering "Best In Class" capabilities that maximize Coast Guard readiness.

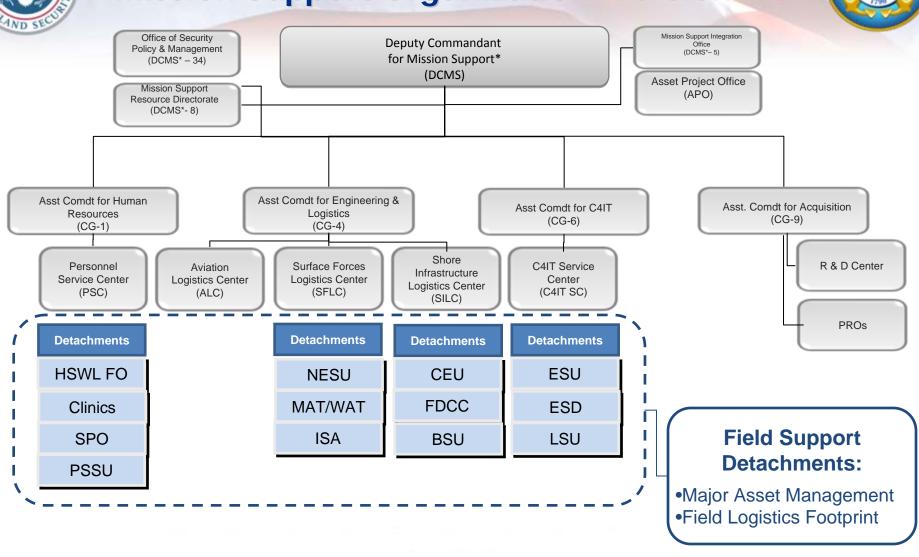
Vision

All people, all platforms, all systems, and all missions always supported.



Mission Support Organization: Version 1.0







The Four Cornerstones



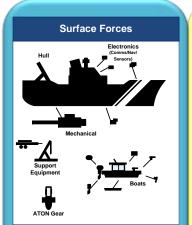
Process transformation will deliver the following Four Cornerstones of the Logistics Business Model identified by the Commandant:





Everybody Owns Mission Support

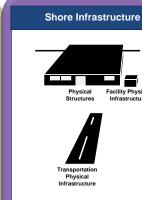




Cutters, Boats, and all attached comms, sensors, and electronics



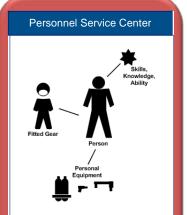
Airframes and all attached comms, sensors, and electronics



All physical structures plus facility support and transportation infrastructure



All information infrastructure not physically attached to a moveable asset and Standard workstation



Military personnel recruitment through retirement support

Who do I call if my cutter, Helo, building, or computer isn't working right or if I need to go to the clinic?

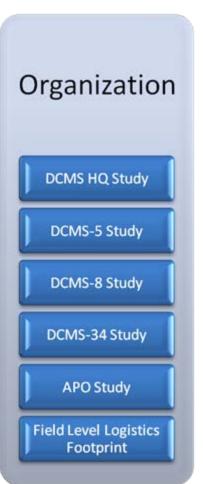
- 1.Call the old POC
- 2.Call the Product Line Manager (PLM) for the asset
- 3.Call the Primary Support Office in my District



Version 2.0 Evolving Mission Support Processes













Evolving Mission Support



Priority Issues

Version 2.0

- ■I-Team: Field Mission Support Delivery Integration Team
- ■I-Team: HQ Modernization Study
- ■I-Team: APO Study
- ■I-Team: DCMS-34 Study
- ■I-Team: DCMS-5 Study
- ■I-Team: DCMS-8 Study

DCMS Headquarters Alignment Field Support Construct

1 Product Line / Logistics and Service Center

SILC

Product Line

Development

Stand Down of MLC/ISC/ HSC Other Initiatives

Business Model Implementation

Human Capital Planning

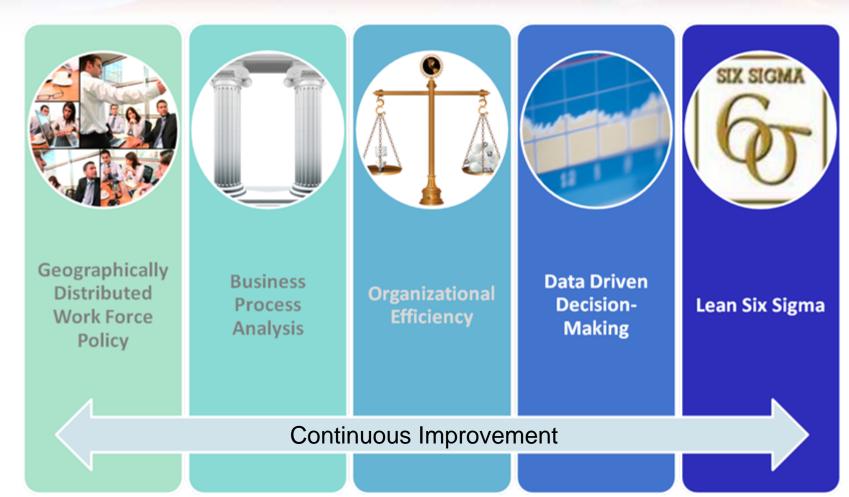
DCMS User Manual

DCMS Strategic Plan



Sustainable Mission Support





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Future COAST GUARD OPERATIONS COMMAND (CG OPCOM)

Modernization Update

RDML James Watson

LANT-3, Operations Division Chief



OPCOM Mission



Mission

OPCOM will be the Coast Guard's
Global Operational Commander
responsible for executing the Coast
Guard's Strategy for Maritime
Safety, Security, and Stewardship in
order to safeguard the Nation
against all threats, hazards, and challenges
in the maritime domain.





OPCOM Vision



<u>Vision</u>



OPCOM will attain and sustain superior mission execution across all Coast Guard missions by linking the strategic and tactical levels of maritime operations.



OPCOM Implementation Progress



Pre-Authorization:

- Numbered LANT Construct (New Capabilities)
 - Established a Director of Operations and Director of Staff
 - Established a Requirements and Analysis Division
 - Established a Preparedness Division





- LANT Command Center
 - CIP/COP CG NCC
 - 10 person Watch
- Increased Synergy
 - NAVCEN ISPLO



OPCOM Implementation Major Initiatives



Upon Congressional Approval:

- Disestablish Atlantic Area
- Divest:
 - Major Cutters
- -Add
 - Maritime Intelligence Fusion Center Pacific
 - Communications Area Master Station Pacific
 - Pacific Area Districts
- Assume
 - Defense Forces West
 - Regional Combatant Commander's Principal Planning Agent





The New Construct in Action



- Mission Cognizance
 - Integrated Operations Command Center
- Analytic Studies and Decision Making
 - District Alignment Study
 - Boat Study
 - LORAM
- Better Coordination
 - LANT-51
 - LANT-53
 - LANT-8







FINANCIAL TRANSFORMATION Modernization Update

Mr. Martin Rajk

CG-8D



CFO Mission



The CFO serves as a trusted strategist and financial advisor to the Commandant and senior leadership. The CFO is the Service financial management technical authority to direct financial management activities, modernize financial management systems and strengthen reporting through integrated business processes and solutions.



CFO Vision



A world-class financial management enterprise that enhances premier mission execution.









CFO Major Initiatives 2010-2011



- Enhanced/expanded capacity and capability
- Alignment of asset, acquisition and financial management
- Extending audit readiness











COAST GUARD FORCE READINESS COMMAND (CG FORCECOM)

Modernization Update

RADM Timothy Sullivan

Commander, Force Readiness Command (FORCECOM);

Deputy Commander, Pacific Area



FORCECOM Mission & Vision



Mission

FORCECOM provides ready forces to meet the supported commander's current and future operational requirements.

<u>Vision</u>

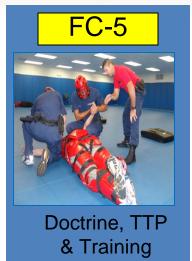
FORCECOM will be the provider of preeminent mission-ready maritime safety, security and stewardship capabilities.



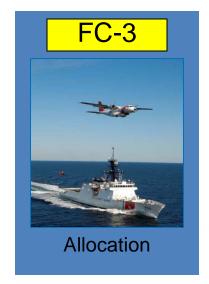
FORCECOM's Integrated Processes

















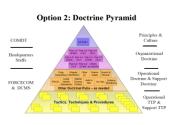
FORCECOM "Making Progress..."





- TTP Innovation from the Field
- GMT Reduction





- Develop Doctrine Structure
- Readiness Dashboard





- Consolidated Assessment Visits
- Global Allocation of Forces





Closing Remarks



http://uscg.mil/modernization



Back-up Slides





Back-up Slides



- 1) Gilbert Study In August 1986, the Commandant concluded that consolidation of some common support functions on an area-wide basis might save resources.
- 2) 1998 Integrated Operations Command (IOC) evaluation
- 3) 1999 Longview strategy exercise completed. This was a Comprehensive strategy exercise which identified ten core strategies and a series of related initiatives
- 4) The terror attacks of September 11, 2001 prompted the Coast Guard to build upon the Long View ideas through the next generation of scenario-based planning
- 5) Evergreen I resulted in the development of four strategic imperatives and eleven core strategies
- 6) 2004 Logistics Management Transformation Office (LMTO) established
- 7) Upon recommendation from the LMTO, the LTPIO was established in July 2005 to carry out the task of transitioning the Coast Guard to a common Logistics Business Model across all asset groups (Aviation, Naval, C4IT, Facilities, and Personnel).
- 8) President publishes strategy for Maritime Security in 2005
- 9) In the Summer/Fall 2005 Hurricanes Katrina and Rita highlighted even more the need for a system that maximizes resources and response to minimize casualties during national disasters
- 10) Jan 2006 Project 126 Quick Studies report provided core strategic, operational, and tactical functions for the C2 study
- 11) The CIAO #7 objective to develop a framework to complete the Operational Command and Control organization assessment IAW COMDT was addressed Command and Control Organization (C2) Study Group final report, published in Sep 2006
- 12) CIAO #4 Aug 2006 Logistics Organizational Alignment Team (LOAT) report was a result of the issuance of CIAO #4 and the approval of the Commandant to transform CG Logistics into a bi-level, life cycle maintenance system and to develop the Mission Support Organization.
- 13) 2006-2009 Evergreen II began from CIAO #6 to ensure the CG renew the Evergreen Cycle and the CG strategic visions to bridge the strategic intent of COMDT Allen to the watch of the next COMDT
- 14) Summer 2006 Commandant Issues 10 Commandant Intent Action Orders (CIAOs). The CIAOs were issued to direct service wide reorg and strategy development to enable more effective mission execution (language taken from signed memo)
- 15) CIAO #2 objectives achieved in Nov 2006 CG HQ reaches initial operation capability; reorganizes into numbered staff
- 16) Jan 2007 Coast Guard Maritime Strategy is published
- 17) Mar 2007 CIAOs integrated into Modernization Efforts (MEs) (DCO, DCMS, FORCEOM ORCOM)



Key Benefits of the Coast Guard Modernization



- Transforms the Coast Guard into a change-centric organization.
- Stronger focus on the needs of our workforce.
- Unifies overall operational Command and Control.
- Standardizes doctrine, tactics, techniques and procedures.
- Enhances and unifies Mission Support systems.
- Reduces layers of bureaucracy and operational friction.
- *Develops* life-cycle sustainment in Acquisitions.
- Significantly elevates support to the field and our operators.
- Bolsters Coast Guard/maritime stakeholder relations.

Ultimately positions the Coast Guard for long-term successful mission execution









TSA's IdeaFactory

An Overview



What is IdeaFactory?

- IdeaFactory is a Web-based tool that empowers all TSA employees to:
 - submit ideas,
 - provide comments on how to improve new concepts, and
 - rate ideas that should be recommended for implementation
- It uses social media concepts to harness the "wisdom of the crowds" and expand upon the traditional suggestion box

IdeaFactory Vision Statement:

Support TSA's mission by fostering a community that engages employees and encourages collaboration to initiate innovative change.



The business need behind IdeaFactory

IdeaFactory was launched in April 2007 to address three key needs at TSA:

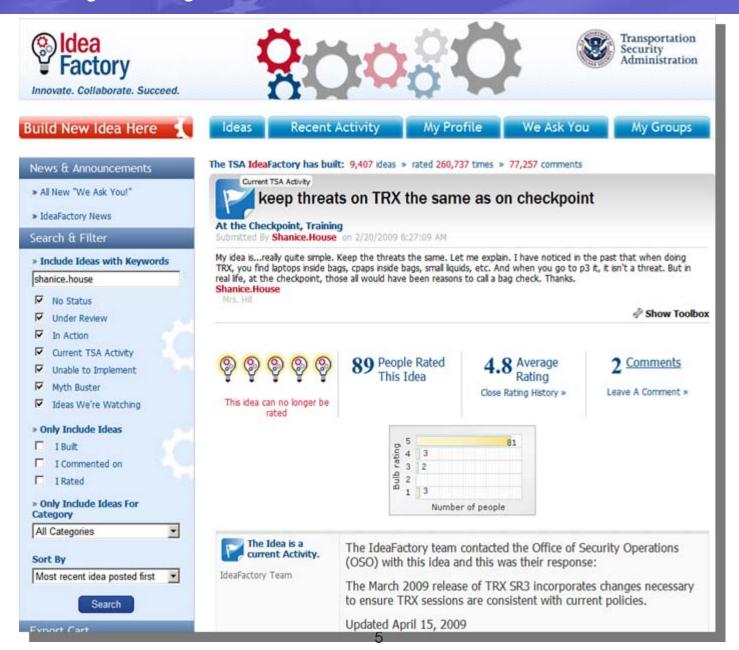
- •How TSA could engage employees and ensure that every member of its large (50,000+) workforce at more than 450 airports and other locations has a voice in the way the agency and its operations evolve;
- How TSA could collect constant, fresh input and perspectives on improvements to keep the agency flexible and effectively mitigate security threats; and
- •How TSA could reinforce its core value of innovation and provide an avenue for employees to 1) identify change opportunities, 2) take on new challenges and 3) have the courage to make a difference.

How we went from concept to launch in 6 weeks

- Driven from the top of the organization
- Created an Integrated Project Team with representatives from legal, communications, information technology, and program offices to push concept forward
- Built a basic site with in-house resources
- Held teaser campaign and live webcast for launch to promote the site
- Implemented ideas as quickly as possible to show employees leadership was taking the program seriously

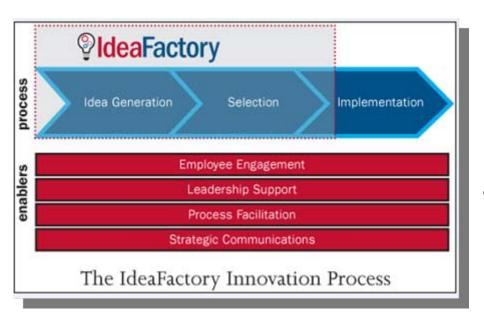


IdeaFactory's key features contribute to success



IdeaFactory enables the overall innovation process

"Build it and they will come" philosophy doesn't work; processes and rules of engagement were necessary.



- The site supports the first step of three key phases in the innovation process: Idea Generation, Selection, and Implementation
 - Employee engagement occurs throughout the entire lifecycle with leadership support and strategic communications enabling the overall program

Program office experts respond to all evaluated ideas



Idea Under Review









The IdeaFactory Team promotes every move we make







Innovate, Collaborate, Succeed.

OSO Photo Contest: "Priorities in Action"

Submit your photos for display at TSA Headquarters!

OSO is holding a photo contest to highlight the 5 OSO Priorities - Mitigate the Threat, People Matter, Support the Field, Work as a Team, and Maske TSA the Place to Work. We are appealing to your creativity and imagination to demonstrate what the 5 OSO Priorities mean to you. Encouraged creations include: photographs, drawings, paintings or anything tasteful that can be displayed at TSA Headquarters!

The contest will be open to all OSO employees, those who reside at an airport or at headquarters, beginning on August 20th, 2009 and running for 6 weeks, through September 30th, 2009. Then you will be able to vote for your favorites right here on the MeaFactory!

IdeaFactory Agreement

The IdeaFactory is subject to our Terms of Use. Before you may access the IdeaFactory you must agree to abide by the Terms of Use. Each network session requires that you agree to the Terms of Use. By placing a checkmark in the box below and clicking the "I Agree" button, you agree to the <u>Terms of Use</u>

√ I agree to the Terms of Use for the IdeaFactory

Click here for a full explanation of the contest and guidelines

Reminder: Please Abide by the IdeaFac

Recently, there has been an increase in unprofessional the ideal-actory. We would like to remind you of the Te accept before entering the site. The purpose of the ide and solutions that could reasonably be implement centaining personal ethacks, bad language, and other un tolerated. If you see any post in violation of the TOU, pi notify the ideal-actory team.

Thank you for your help in keeping the IdeaFactory a for positively impact TSA.

The IdeaFactory Illuminator

Vol. 2, Issue No. 7 - July 2009

IdeaFactory in the News!

InformationWeek

InformationWeek recently profiled how technology is being used successfully in the government in the article, "Tech Innovation USA: From Resilient Networks to Self-Scheduling Devices."

The IdeaFactory was one of the programs featured in the article, as an example of an in-house developed crowd-sourcing application that anyone could model.

"Any organization could put the tool to use—if they have that kind of buy-in from senior leadership," says IdeaFactory program manager Tina Cariola. "It's really a tool that's more than just the ideas".

"It's about building a community and engaging and empowering the workforce, especially a distributed workforce like we have."

Other agencies featured include Defense Advanced Research



TSO Casey Flynn Visits HQ

Earlier in July, TSO Casey Flynn (above left) had an idea to reduce operational expenditures by setting current Reveal CT-80 EDS machines to idle mode when not in use. He decided to share his idea on the IdeaFactory and within two days, it caught the eye of David Holmes (above right), Assistant Administrator, Office of Inspections.

Aaron Batt and the Office of Security Technology (OST) arranged for Casey to visit Transportation Security Administration Systems Integrated Facility (TSIF) at Reagan National Airport to discuss the possibility of making his idea reality. TSIF is a place where new technologies are tested and piloted before rolling out to airports nationwide.

While Casey's idea, <u>CT-80 Money Saver</u>, has not been given the official green light, Operational Process and Technology (OPT) is in the process of evaluating the merits of his idea. If feasible, his idea could lower maintenance costs on the CT-80 machines and conserve

IdeaFactory: Tools You Can Use



SEARCH for ideas related to your program office to see what the workforce is saying about you.



ASK for feedback on specific topics related to improve new or existing programs using We Ask You!



CONTACT your office's IdeaFactory liaison if you find an idea that you would like to implement at TSA

Contact the IdeaFactory Team at IdeaFactory@dhs.gov for more information.



Transportation Security Administration



IdeaFactory is a successful program

- Allows employees to contribute actively and help shape TSA's programs, policies, and procedures
- Provides a "voice" for employees to share insights and be heard and opens lines of communication from field to HQ
- Enables employees to "talk", educate and inform each other and build an online community
- Allows HQ program offices to obtain valuable program feedback and interact with employees directly
- Fosters information sharing by allowing program offices to post relevant updates, dispel myths and explain reasoning behind actions

QUESTIONS

Questions

- Please approach the microphone on the floor to ask questions
- No "yelling" from your seats
- Please state your name and organizational affiliation before asking question









Innovation Management: Harvesting Ideas for Exponential Efficiency Improvement



Format for Discussion

Introduction of Panel Members

Panel Presentation

Questions

Final Comments

Panel Members

- Ms. Montressa Washington
 - IBM Global Services
- Ms. Christa Semko
 - Dell Computers
- Ms. Tina Cariola
 - Transportation Security Administration
- Dr. Phil Samuel (Moderator)
 - BMGI





Beyond Brainstorming for Breakthrough Innovation

Phil Samuel, Ph. D.

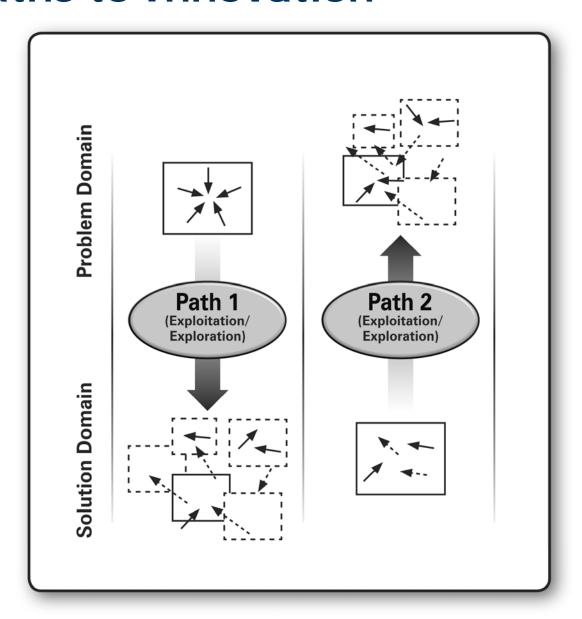


1

Treat Innovation as a Process

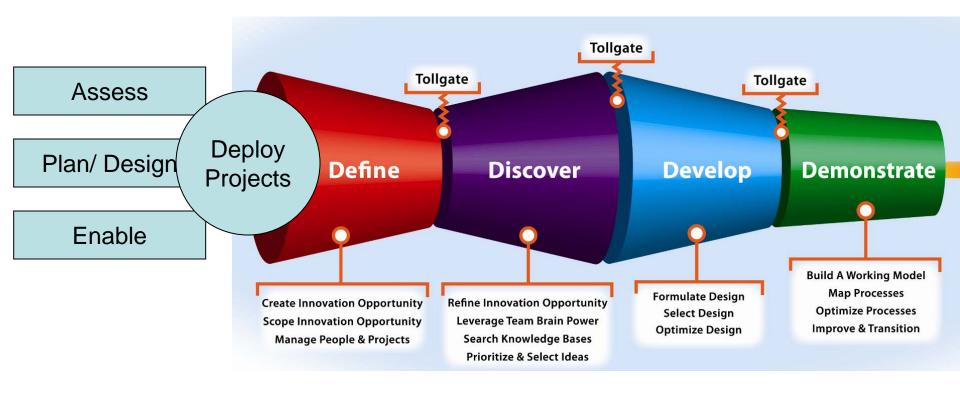


Two Paths to Innovation





Innovation Process



Model for Innovation Projects

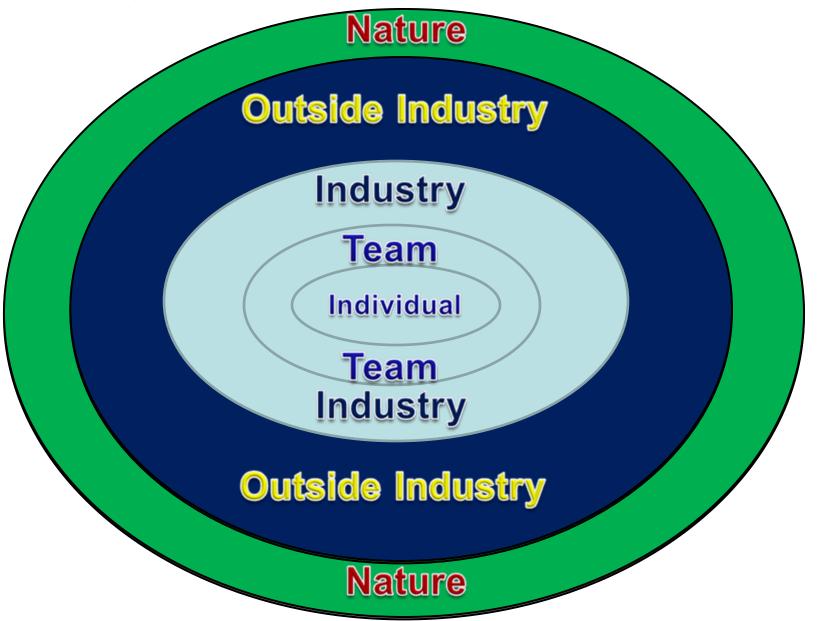


2

Look Beyond Your Industry For Ideas

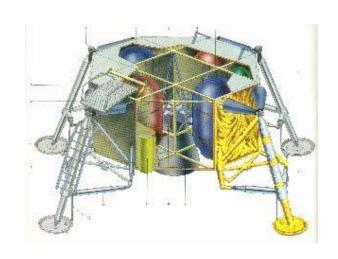


Where do Ideas Come From?

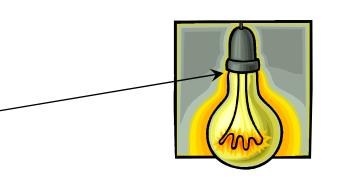


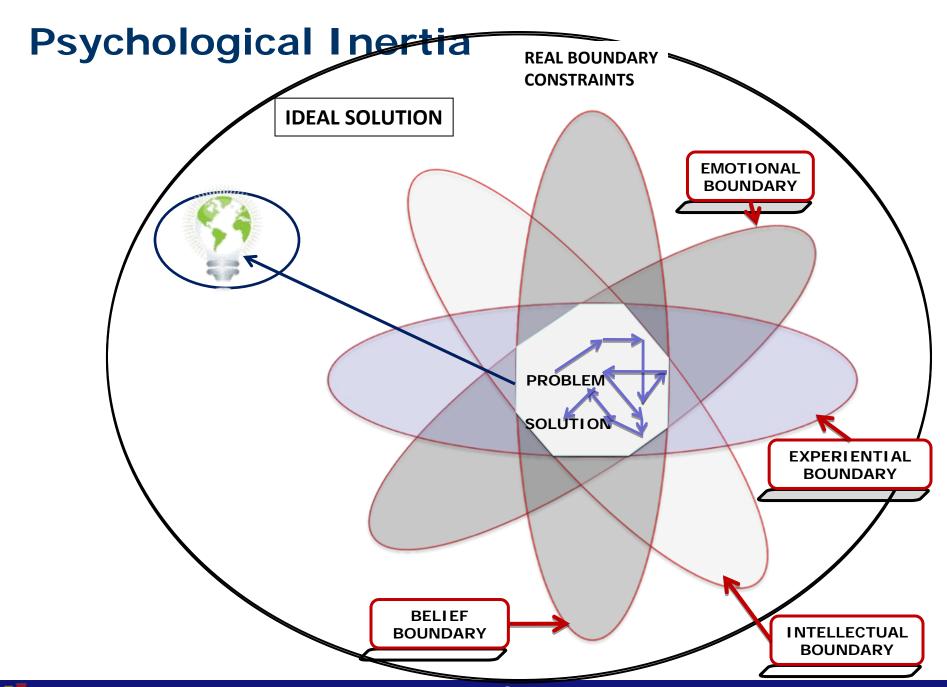
Russian Lunar Vehicle Light Bulb

 The Russians launched an unmanned Lunar Probe to the moon's surface with the intention to transmit TV pictures to the Earth. A projector using a light bulb was designed to illuminate the lunar surface ahead of the vehicle. However, existing light bulbs would not survive the impact of landing on the Moon surface.

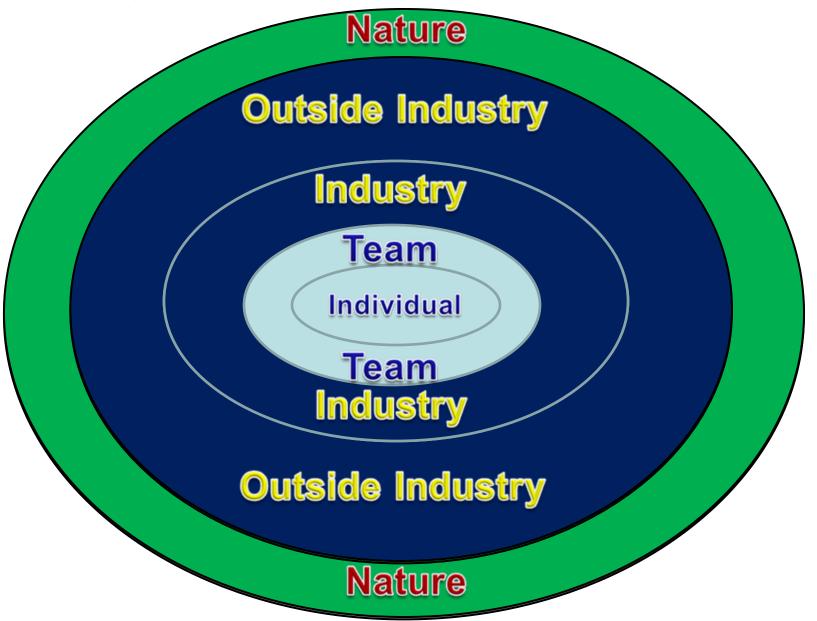


- The most durable bulbs were ones used in tanks, but even those bulbs would crack at the joint between the glass and the screw base during tests.
- Problem How to keep the light bulb from cracking at the interface between the glass bulb and the base?





Where do Ideas Come From?





Catching Errors in New Car Models



- GM had a problem. It took GM over 70 days to track an error introduced while assembling a new car model
- GM used Process
 Benchmarking and Forced
 Association techniques to innovate
- Who is good at catching errors very quickly?
 - Answer: CDC

Center for Disease Control

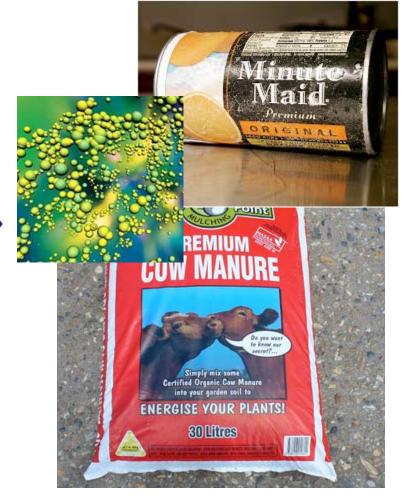


- CDC is able to track down the source of food poisoning within 72 hours of event
- By adapting the principles from CDC, GM reduced the time it takes to track vehicle errors from 70 days to less than 10 days resulting in savings of billions of dollars from recall expenses

Dairy Farm Steals a Page from Frozen Orange Juice Industry





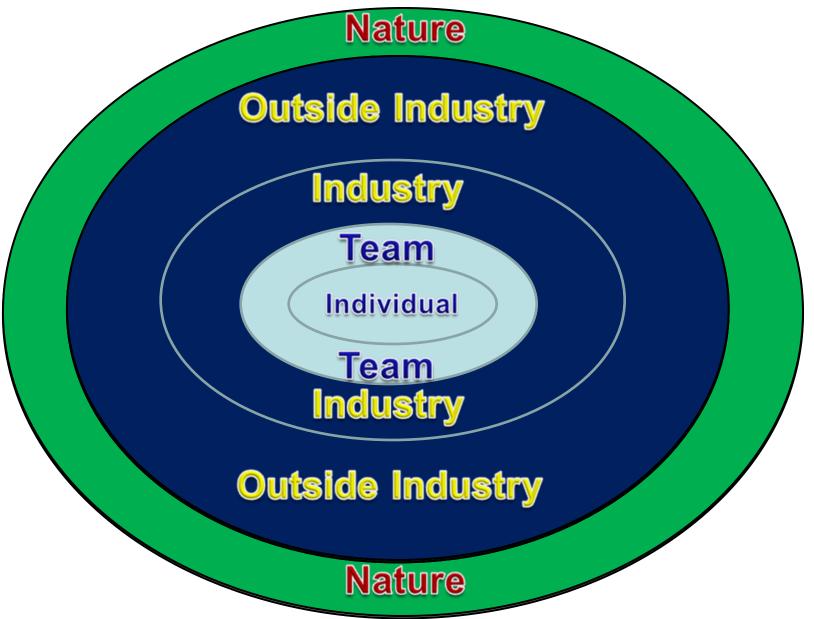


Simply mix some Certified Organic Cow

30 Litres

ENERGISE YOUR

Where do Ideas Come From?



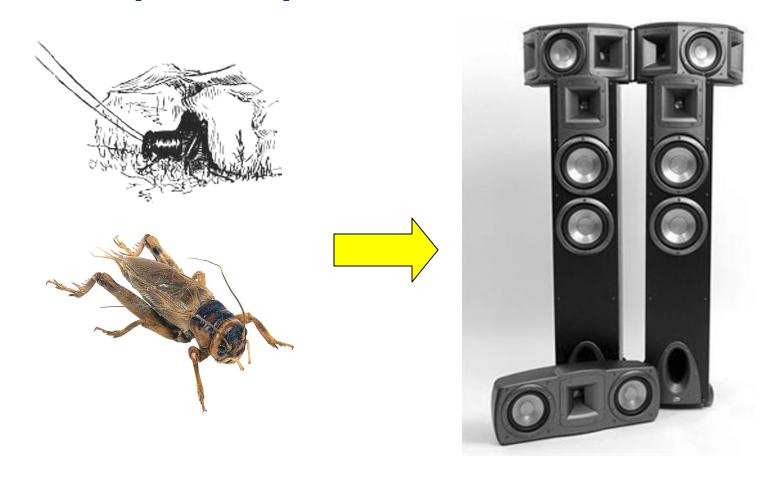


Kevlar vs Spider Webs





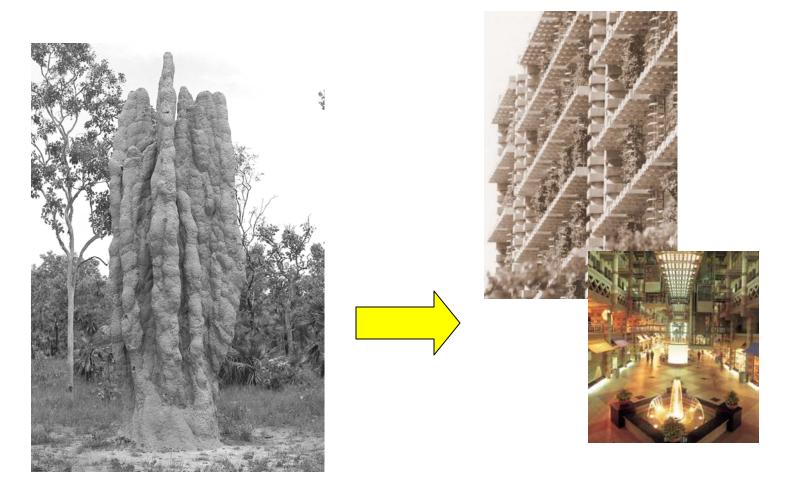
Cricket Inspired Speakers



Imagine making high-end audio speakers based on a cricket that uses its burrow to amplify sound. New Klipsch speakers are created by studying how Egyptian mole crickets amplify sounds



Termite Inspired Building



A termite mound can seem eerily like a skyscraper, especially when you consider the mount's efficient regulation of air flow, temperature and humidity.



Solving World's Water Problem



Namibian Beetle



Pill Bug





EMPLOYEE AND CUSTOMER INNOVATION THROUGH TECHNOLOGY



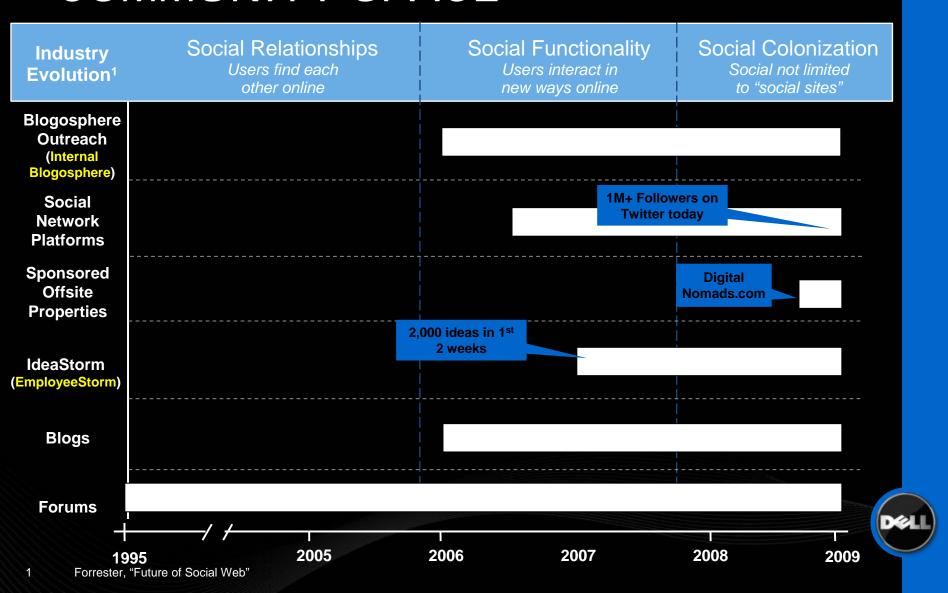
Christa Semko Dell Inc.

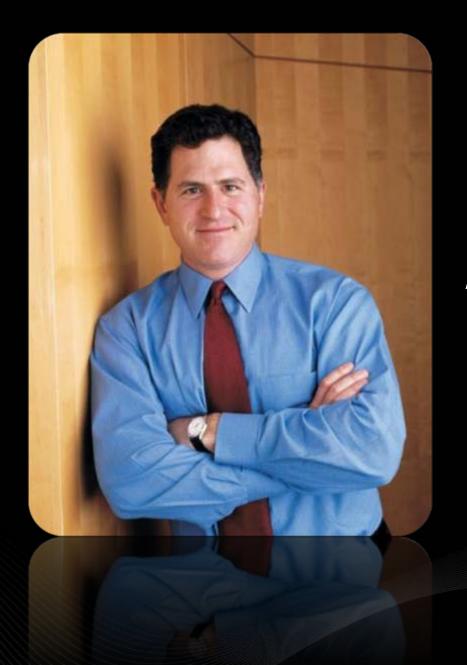
"We spend a tremendous amount of time communicating. We have to talk in realtime...because we're in a real-time business. A sense of urgency about communicating and solving problems is imperative."

- Michael Dell



DELL WAS AN EARLY ADOPTER AND INNOVATOR IN ONLINE COMMUNITY SPACE





"A company this size is not going to be about a couple of people coming up with ideas. It's going to be about millions of people and harnessing the power of those ideas."

- Michael Dell



MANAGING OUR IDEA GENERATION SITES

IDEASTORM

- Public POSTS ideas for Dell products and services
- Community COMMENTS or VOTES on ideas (+10 points for each promote and -10 points for each demote)
- Popular ideas float to the top via the wisdom of the crowds
- Dell responds with Ideas in Action (on Direct2Dell)

EMPLOYEESTORM

- Employees POST ideas for employee-specific items (HR, Facilities, Cafeteria) and/or customer-specific items (Sales, Marketing, Products)
- Employees COMMENT or VOTE on ideas (+10 points for each promote and -10 points for each demote)
- Popular ideas float to the top via the employee opinions
- Dell responds with Ideas in Action (on One Dell Way)



IDEASTORM LAUNCHED FEBRUARY 2007

OBJECTIVE:

Encourage ideas, feedback, input and dialogue from customers

RESULTS:

- 12,000+ ideas generated by the community
- -~700,000 promotions of ideas
- 87,000+ comments
- ~400 ideas Implemented by Dell



EMPLOYEESTORM

LAUNCHED JUNE 2007

OBJECTIVE:

Encourage ideas, feedback, input and dialogue from employees

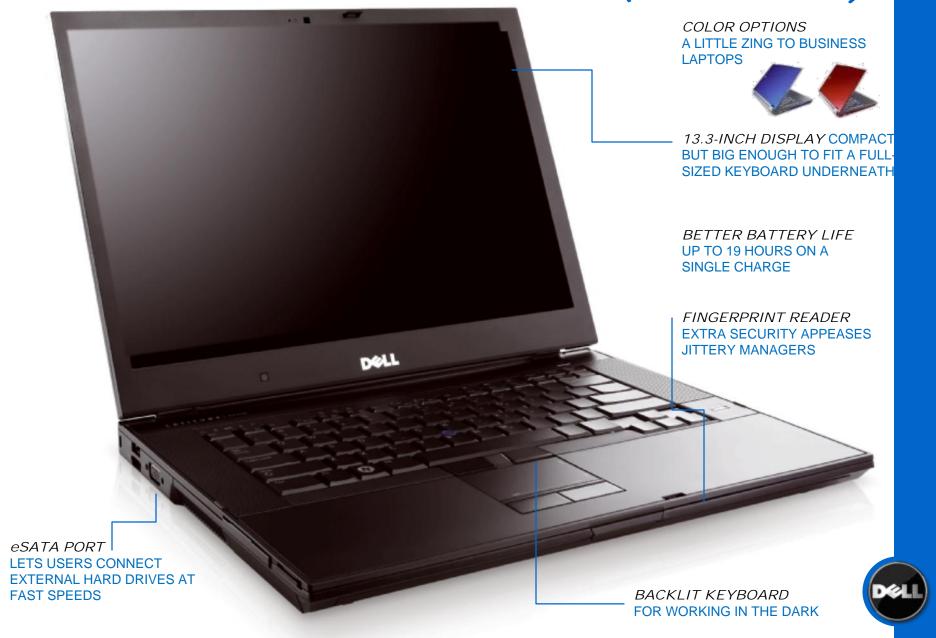
RESULTS:

- 5,000+ ideas generated by employees
- 272,000+ votes on ideas
- ~25,000 comments
- 200+ ideas implemented by Dell

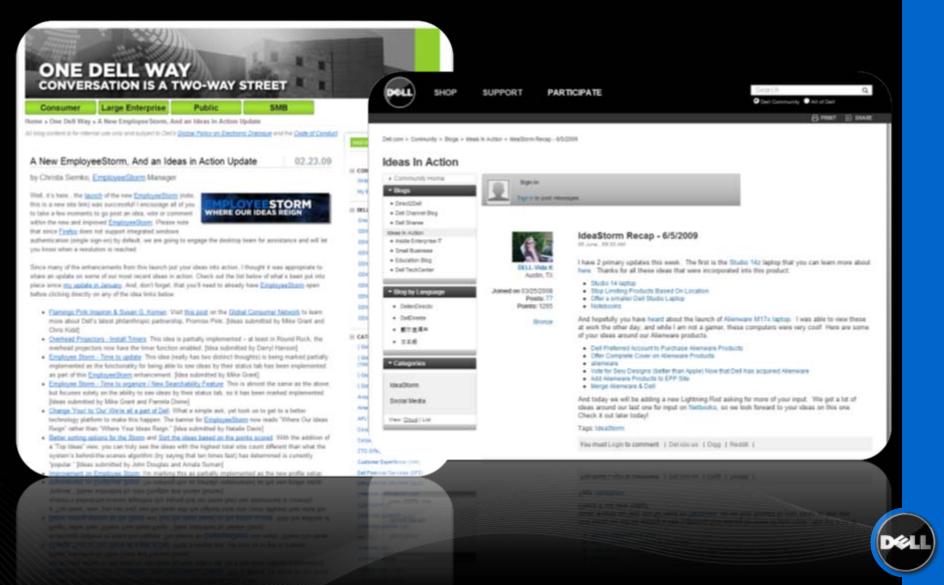




CASE STUDY - LATITUDE (AUG. 2008)

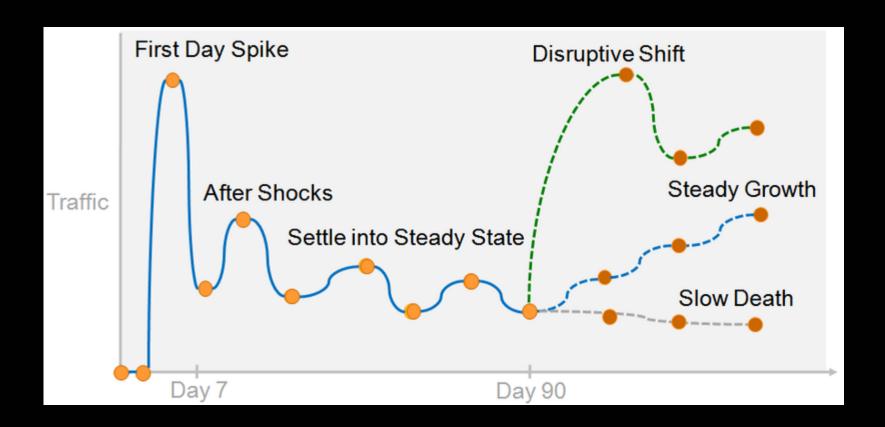


REGULAR FOLLOW-UP INTERNALLY AND EXTERNALLY





#1 - BE PREPARED FOR THE INITIAL SPIKE OF IDEAS



- IdeaStorm received 2,000 ideas in first 2 weeks
- Community expects immediate response/engagement



#2 - EXPECT AND ACCEPT NEGATIVE COMMENTS

- Transparency is the key to success.
- Admit your mistakes take ownership.
- Community expectations on feedback will always be high. Better to communicate "you don't know" or "are reviewing" than nothing at all.
 - Remember, social media is about two-way dialogue and the company and leaders' voice is critical to that dialogue
 - Caveat must walk to the fine line between transparency and corporate sensitive information



#3 - INTERNAL INPUT IS AS CRITICAL AS EXTERNAL INPUT

- Don't leave employees out of the mix
 - Lesson learned may be better to start efforts with employees FIRST
- Dell has a mirrored social media environment internally and externally
- Responding to employees concerns and comments is critical to encourage continued participation



#4 - HIRE THE RIGHT PEOPLE TO REPRESENT YOUR COMPANY ONLINE

Passion

- People who are truly passionate about social media live it inside and outside of work.
- People who your community would accept and see as one of their own.

Online Experience/Personality

- You can not judge a good online personality from an in-person interview. If you can find them online, READ. Someone might be great online and awkward in person.
- People who aren't afraid of being in the public (picture, name, etc).

Communication Skills

- Need to be able to walk away. Personality should not be that of a need to win every argument or have the last word.
- People who are talkative and can build relationships with strangers.
- Ability to balance the relationship/customer aspect with planned messaging and other communication goals.



#5 - IDEA MANAGEMENT IS THE SECRET SAUCE TO IDEAS SUCCESS

- Reporting
 - Detailed for appropriate business unit
 - Executive overview
- Idea grouping and categorization
 - Align right ideas with right POC / SME
 - Idea Assignment, tracking, nagging, ownership
 - Balance the push and pull of information
- Historical information tracking









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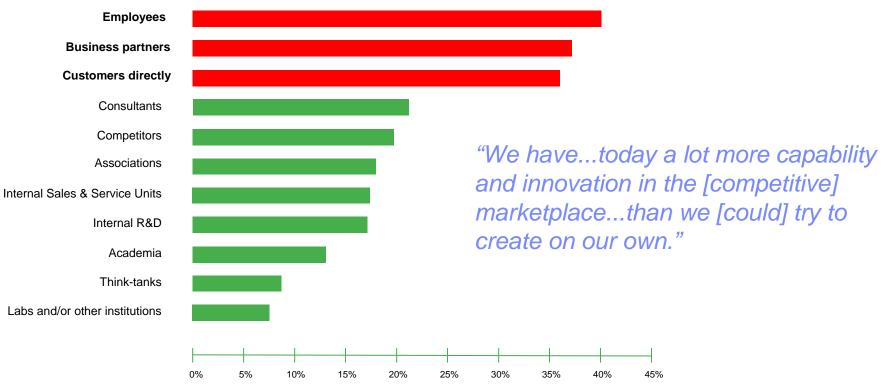
Building a Collaborative Innovation Culture

Montressa Washington Human Capital Management IBM Global Business Services montress@us.ibm.com



Your Workforce is your #1 Innovation source

CEOs: Top sources of new ideas and innovation Collaboration sparks innovation



IBM Institute for Business Value, CEO Study 2006



Today's business challenges require new ways to mobilize and focus the workforce on major change agendas

Validate, Align, Operationalize

- Are your innovation priorities broadly understood by your stakeholder community?
- Can your company tap into the expertise of the entire workforce or ecosystem to address strategic business issues?
- Do you have a great, revenue-producing idea, but are not able to implement or scale it?
- Are you looking to <u>catalyze</u> and focus an innovation agenda?
- Are you in the midst of defining broad, urgent or strategic transformation programs?
- Is it time to rethink your organization's values and how to bring them alive in daily operations?
- Do you need immediate employee feedback about important, strategic issues?







An introduction to Jams

- Massive on-line discussions using the internet
- Pre-defined topics focused on strategic and enterprise critical issues
- Time limited event with participation from tens of thousands, even hundreds of thousands, anywhere in the world
- Moderators and facilitators guide participants to build on each other's ideas
- Process to engage participants in realtime to generate deeper insights
- Real-time text analysis and mining to highlight emerging trends and distill actionable results









- Strategic Planning Process
- Environmental/Health Challenge
- Six Sigma
- Citizen/Customer Focus
- Blue-Sky Innovation
- Cost Reductions & Time Savings



- Expanding/Declining Market Shares
- Product Launch Innovation
- Business Process Efficiency
- CEO Challenges

- Business Transformation
- Problem Identification
- Crisis Resolution
- Meeting Facilitation (including Offsites)
- Voice of Customer (VOC)
- Merger Integration
- Best Practice Sharing
- Employee Engagement
- Expert Identification and Knowledge Sharing
- Project Resurrection
- Community Building
- Open Innovation...





The possibilities for collaborative innovation are endless!



Several success stories of utilizing Jam



- First industry-wide virtual collaboration event to address the challenges facing the North American supplier industry
- Over 150 companies with participants ranging from CEOs to middle managers and engineers
- Results: Redefined the Supplier OEM relationship. Addressing multi-million dollars returnable container issue



- CEO sponsored to identify ideas to realize the company's new strategy with it's new values as the framework
- Over 1/3rd of Nokia participated from 40 countries including factory workers, sales teams, R&D and manufacturing
- Results: Nokia-wide restructuring to focus revenue growth in expanding AP consumer markets



- The World Urban Forum (WUF) was established by the United Nations to examine rapid urbanization and its impact on cities, economies and policies
- HabitatJam was the largest brainstorming ever on urban sustainability bringing together not only NGOs, politicians and academia – but the slum dwellers whose lives were directly impacted by this body
 - Results: 8k+ ideas netted down to 70 – all presented and adopted at the WUF3 conference as it official platform



- CEO sponsored to generate practical ideas to help drive and realise the new values into the company.
- Over 1/2 of Lilly participated from 40 countries including factory workers, sales teams, R&D and manufacturing
- Results: Greater adoption of new values program, and hundreds of ideas, one example in SCM packaging saved \$14M



Select output from Lilly's Vision Jam

Backup

- Half of Eli Lilly's global population came together to help the company realize it's new values using the Jam to generate practical ideas to help drive the new values into the organization.
- New corporate responsibility framework to align with ideas and insights from the Vision Jam
- "Green chemistry" initiative has demonstrated potential for a 100-fold reduction in use of hazardous raw materials
- "Global Service Day" involved more than 20,000 Lilly employees in service projects worldwide that improved their local communities and helped patients
- Innovative packaging approach cutting waste and cost saving more than \$14 million
- Met four of six 2010 environmental and safety goals early leading to more aggressive goals for 2013



"I am convinced the Jam will be remembered as a transition point in Lilly's history to drive change."

- Eli Lilly CEO, Sidney Taurel

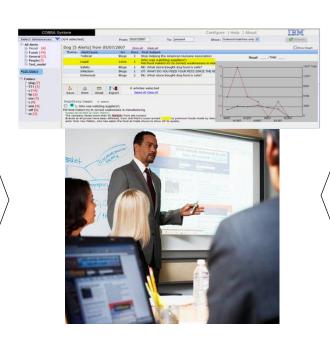




How are results compiled?

Texting & data mining analysis

- Using COBRA a proprietary text-mining tool can identify emergent themes in real-time and at milestones.
- Run custom reports to determine content themes
- Poll and statistics will be provided
- * Real time business analytics



Strategic insight analysis

- Review transcripts and extracting detailed ideas not captured through tools
- Grouping, Segmentation analysis, Value Driver analysis, Heritage Influence, Strategic KPI analysis, Mind maps, Organizational Culture Profile analysis
- Connecting dots between different discussion to determine mega themes

Data driven strategic actions

8 12/8/2009 © Copyright IBM Corporation 2008



Several analytical outputs from Mini Jam using text and data mining tools

Social Networking

 Drives additional participants to live event and identifies natural champions for post event implementation



Viral registration referral program

Other reports:

- Top rated posts
- Final list of Hot Ideas and Focused Discussion Posts

Collective Intelligence

 Real-time business analytics on emerging themes during live event and in post event analysis

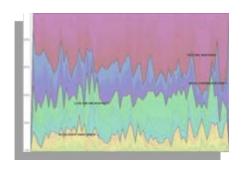


IBM Research data analytics tool (COBRA)

 Final participation data (total log-ins, unique posts, unique users, total posts by forum, etc.)

Data Visualization

 Monitor rate of participation by location, job role, other demographics during live event and as part of post event analysis



IBM Research data visualization tool (ManyEyes)

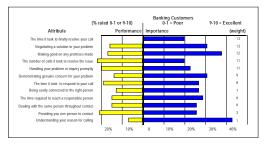
- Affinity, Sentiment and Theme reports from COBRA
- Export of all user data & posts



Insights using strategy tools (where applicable) leveraging Jam data

Customer Value Drivers

 Purpose: Identify and rank value drivers (quality, service, cost, and time) in importance to the customer or other stakeholders – Jam poll data can be utilized

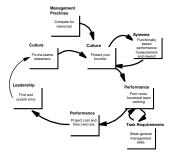


 Possible Outputs: Identify important, value drivers and relative weights

Heritage Influence Maps

 Purpose: Understand potential opportunities and constraints in taking advantage of business opportunities

 Possible Outputs: Mapping of interdependencies key issues as identified through COBRA and indentifying roadblocks to success



Strategic KPI Analysis

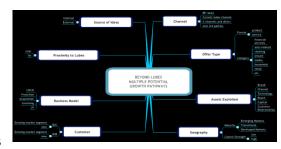
- Purpose: Focus on the KPIs, which drive company's strategy and vision.
- Possible Outputs: Determine the primary influencers/

Dimensions	Strategic Direction	Strategy Map	Strategic Objectives	Measurements Targets	Strategic Projects
Finance		Bagge etalog			
Customer	Verbesserung des		Improve Service	Customer satisfaction index + 25%	Training
Processes	Kundenservice				
Learning & Growth				Illustrative	

KPIs to achieve company direction (i.e. brand heritage etc) and objectives

Mind Maps

- Purpose: Provides a structure to link and illustrates an overall structure to information gathered from miniJam.
- Possible
 Outputs: Map
 discrete themes
 identified from
 Data Cloud tool to
 view additional
 details and
 determine linkages





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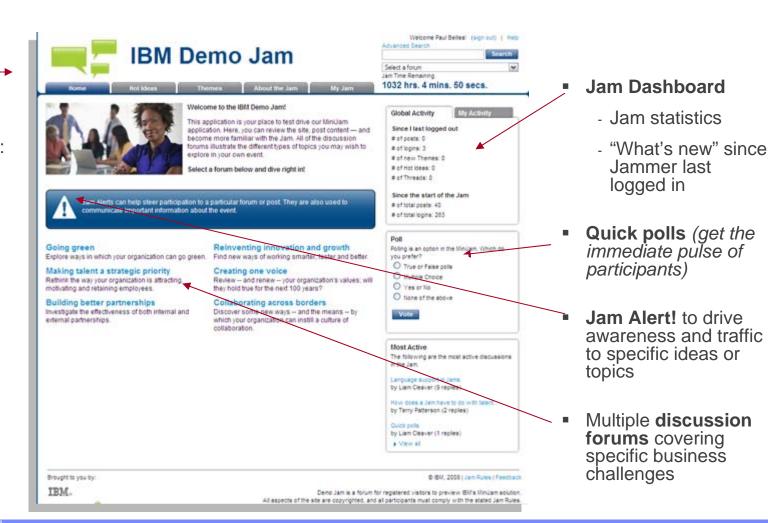
APPENDIX





Peek inside a MiniJam

Features
 multiple tabs:
 Home
 (default
 view), Hot
 Ideas,
 Themes,
 About the
 Jam, and
 MyJam







Peek inside a MiniJam - Discussion Forum page

- Focused Discussion
 - Facilitators promote threads to draw awareness and promote deeper dialogue
- Jammer's "business card" to provide quick background on person
- 'Watch Jammer' to track people of interest aggregated on MyJam tab
- Jam Hosts help guide and steer conversations given the nature of their role within the organisation







Peek inside a MiniJam - Discussion Thread level



- Rating a post is an optional feature and results are tallied in the Jam admin tool
- 'Watch Post' to track a discussion thread of interest and quickly find via the MyJam tab
- Facilitate Comment is how the client's trained facilitators promote content during the event
- Admin Comment is accessible only by the event administrator to take action on a post in the event a participant's comments violate the agreed to Jam Rules





Peek inside a MiniJam – My Jam tab

- 'My Posts' allows you to keep track of your posts and any replies
- 'My Watch Post' to track a discussion of interest or one you want to find quickly over the course of the Jam
- 'My Watch Jammer' to track individuals you work with, respect, or appreciate their perspective on a given topic
- 'My Polls' to view the results of the polls you participated in
- 'My Network' to find participants of the most interest or relevance to you in the event

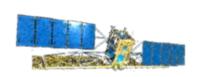








National / Naval Ice Center (NIC)







NIC Brief Session on Coast Guard Missions and Tomorrow

USCG Innovation Expo 18 November 2009

Dr. Pablo Clemente-Colón, Chief Scientist







USCG USN NOAA



The National Ice Center (NIC) Mission and Structure

- Tri-agency organization
 - 50 military and civilian personnel in Washington, D.C. metro area
 - Global sea ice analysis and forecasting
- International Partnerships
 - North American Ice Service (NAIS)
 - Canadian Ice Service (CIS)
 - International Ice Patrol (IIP)
 - International Arctic Buoy Programme (IABP)
 - International Ice Charting Working Group (IICWG)















NAIS

IAPB

IICWG

<u>Mission:</u> provide the highest quality timely, accurate, and relevant snow and ice products and services to meet the strategic, operational, and tactical requirements of U.S. national interests across a global AOR.



NIC Organization Structure



United States Fleet Forces Command

Commander
Naval Meteorology &
Oceanography
Command (CNMOC)

Naval Oceanographic Office Stennis Space Center, MS (NAVOCEANO)

NAVICECEN
Naval Ice Center



NOAA

National Environmental Satellite, Data & Information Service (NESDIS)

Office of Satellite
Data Processing
& Distribution (OSDPD)/
Center for Satellite
Applications & Research
(STAR)

National Ice Center



COMMANDANT United States Coast Guard

Operations
Directorate (CG-3)

Waterways Management Directorate (CG-3PW)

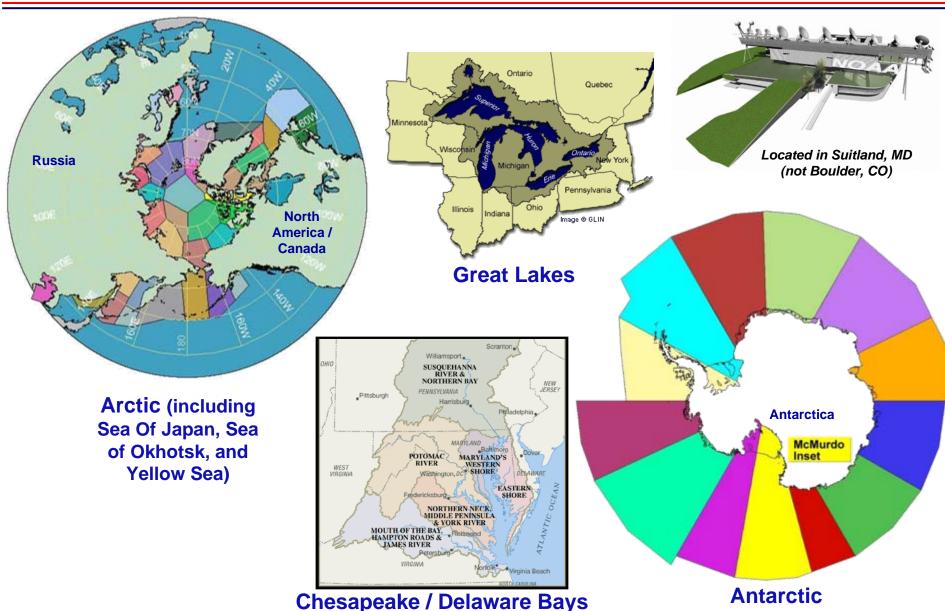
Office of Maritime Transportation System (CG-3PWM)

Mobility & Ice
Operations Division
(CG-3PWM-3)

National Ice Center



NIC Area of Responsibility - Global





Operations and Product Generation

Human, Derived, Automated, and Reconfigured

Inputs





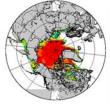
Aircraft



Surface Obs



Buoys



Models

Expert Ice Analyses, Forecasting, and Quality Control



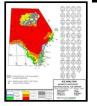
Data Fusion



Derived Data Automation

Direct Data Dissemination

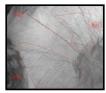
Products



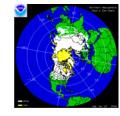
Hemispheric and Regional Ice Charts



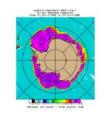
Annotated **Images**



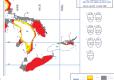
Fractures, Leads and Polynyas (FLAP)



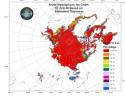
IMS snow and ice maps



Microwave Sea Ice Concentration products



Ice Forecast **Outlooks**

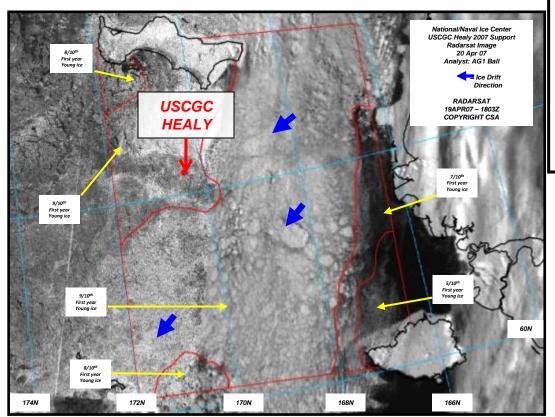


Ice Thickness **Estimations**

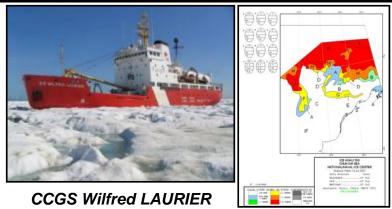


Safety of Navigation, Life & Property

USN, NSF, CCG, USCG



Support provided for Spring 07 USCGC HEALY cruise





"Our use of Arctic transits to support higher presence levels in the PACOM AOR is an example of how we are making full use of every asset we have in the most productive way we can"

VADM MUNNS, COMSUBFOR

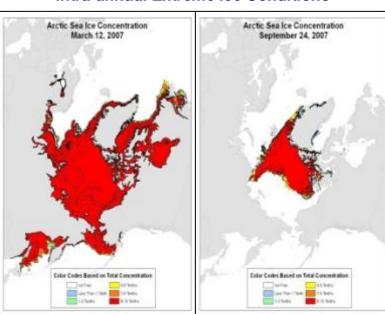
USS ALEXANDRIA



Mission Planning

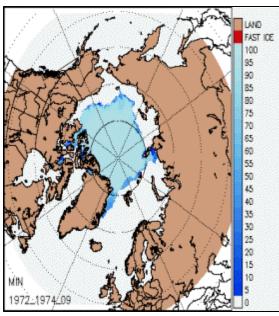
US Submarine Forces, Arctic Submarine Lab, US Coast Guard

Intra-annual Extreme Ice Conditions



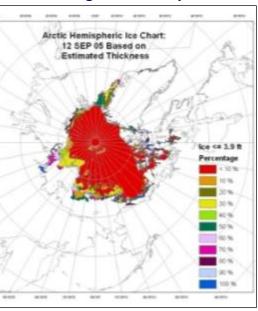
Ice Area = 14.16 million sq km

33 year Arctic Climatology dataset



Archived at NSIDC

Thickness inferred from stage of development



Used by ASL

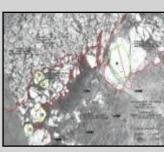


Surfaced submarine in Arctic

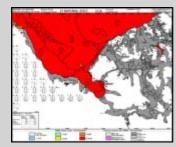


Ice Area = 3.98 million sq km

Environmental effects on ships



Floe identification for Ice Camp 2007



Arctic Seasonal
Outlook



Northwest Passage Routes

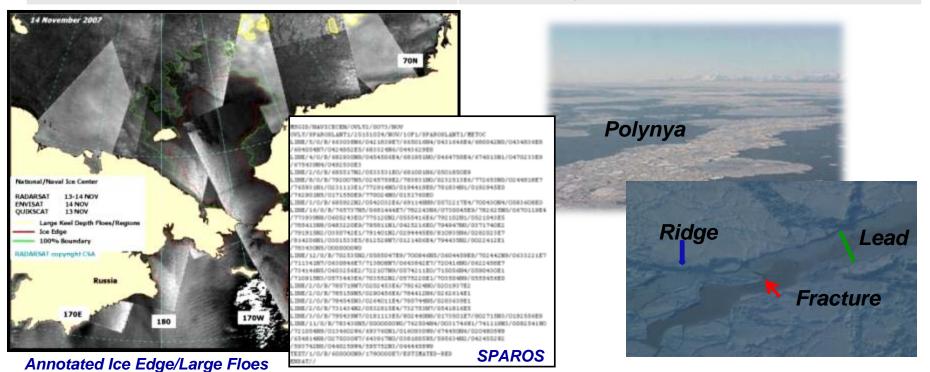


Situational Awareness

US Submarine Forces, Arctic Submarine Laboratory

US Submarine Force

Application	Product
•Safety of navigation through Arctic	Fractures, Leads and Polynyas (FLAP)
•Determines operational posture	Marginal Ice Zone (MIZ)/ Ice Edge
•Determine potentially deep (hazardous) keels	Arctic iceberg/floe analysis



"This allowed [us] to evaluate and plan the final PD trip prior to the MIZ, determine when the arctic routine would commence and when the ship would enter the MIZ and pass under the ice canopy"



Scientific Research Support

US Coast Guard, National Science Foundation, NOAA

- Daily annotated RADARSAT imagery
 - Seasonal outlooks and forecasts
 - Onboard analyst support
- Directly liaise with OPS and Science personnel

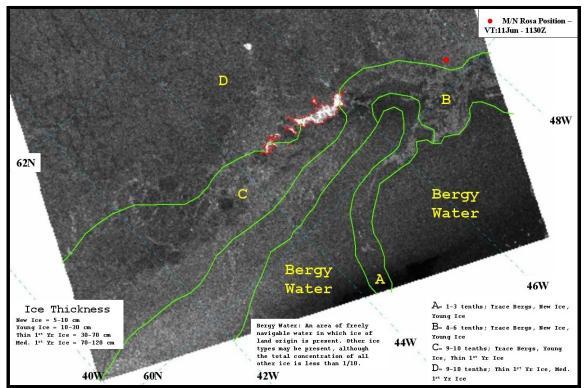






International Emergency

M/V ROSA



"We have received the requested satellital information and we are extremely gratiful for the important collaboration that you offered us. For your knowledge the satellital information was very useful to us. It was a relevant element in our planning during the assistance to the M/V "Rosa" ship in proximities to the Islas Orcadas during the 11, 12 and 13 june."



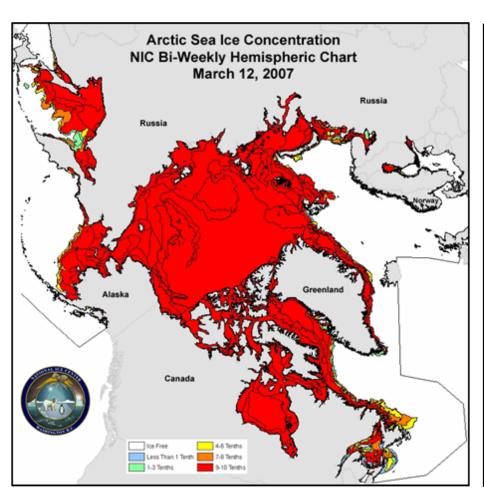
Operated by the Argentines

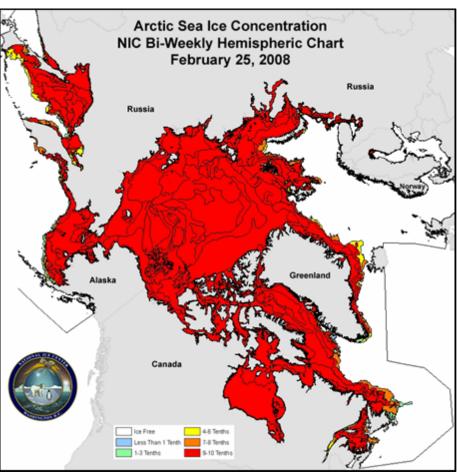


-- AGENCIA NACIONAL SAR MARITIMA, FLUVIAL Y LACUSTRE ARGENTINA



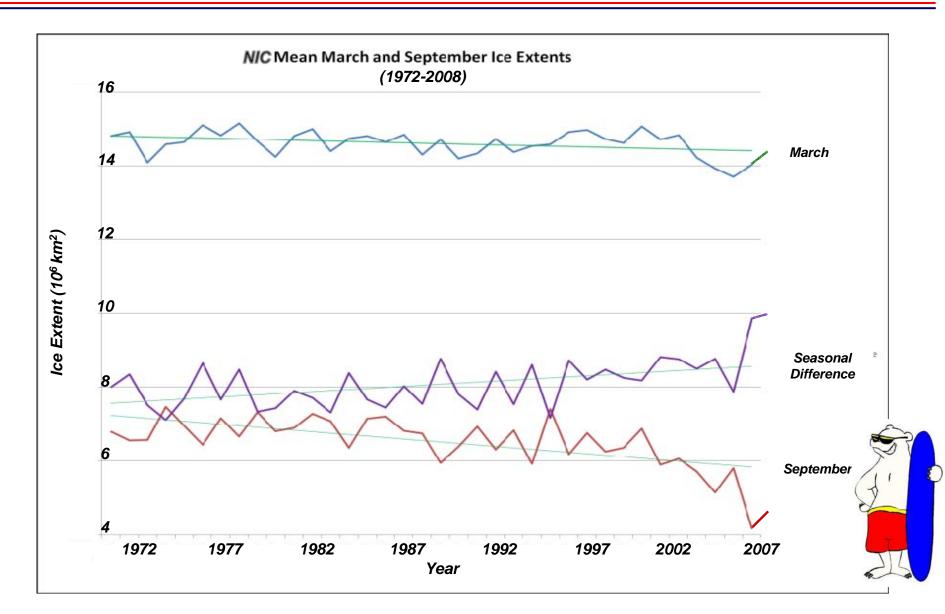
Arctic Sea Ice Retreat in 2007 and 2008





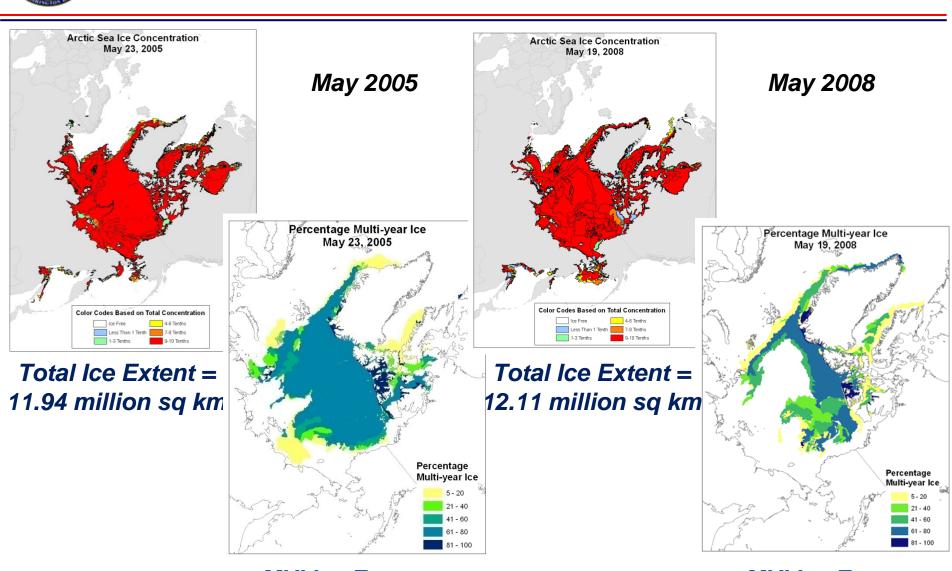


Arctic Sea Ice Extent Declining Trend





Arctic Sea Ice Extent vs. MYI Distribution

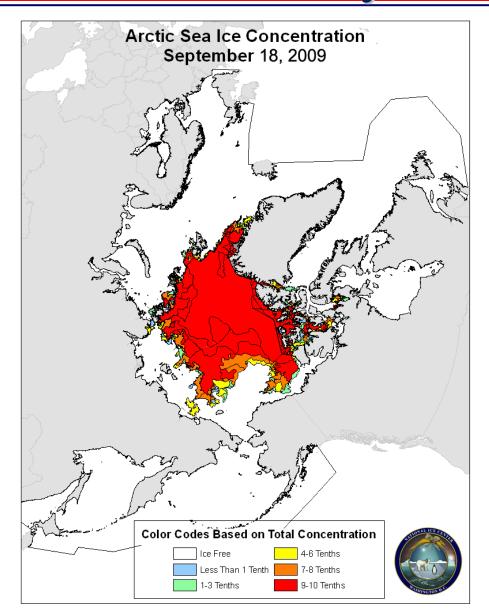


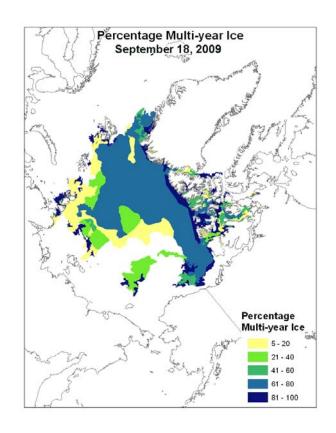
MYI Ice Extent = 6.20 million sq km

MYI Ice Extent = 3.89 million sq km



2009 End of Summer Conditions NIC Analysis - 18 September



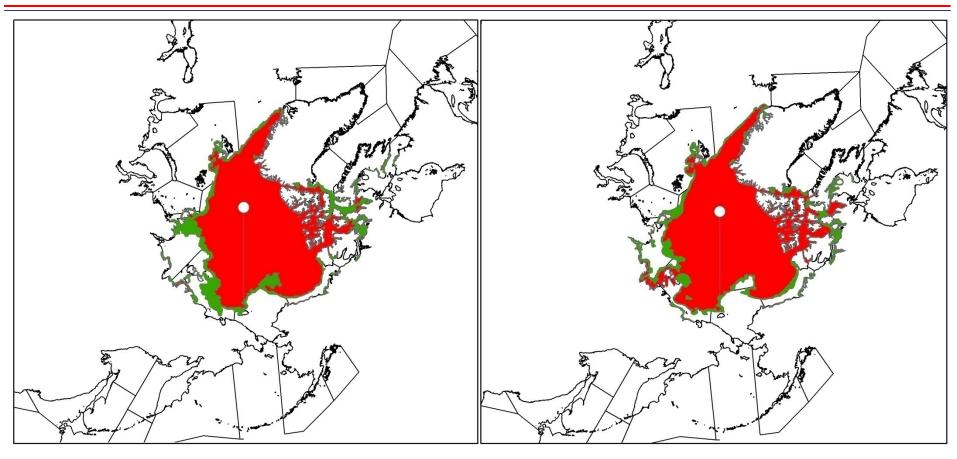


- 3rd lowest sea ice extent
- same or just below 2008 MYI extent
- more second year ice than in 2008



Daily Ice Edge and Marginal Ice Zone (MIZ)

Changes in the Marginal Ice Zone Along the NSR



7 October 2009

MIZ

Pack Ice

ICECODE

CT18

CT81

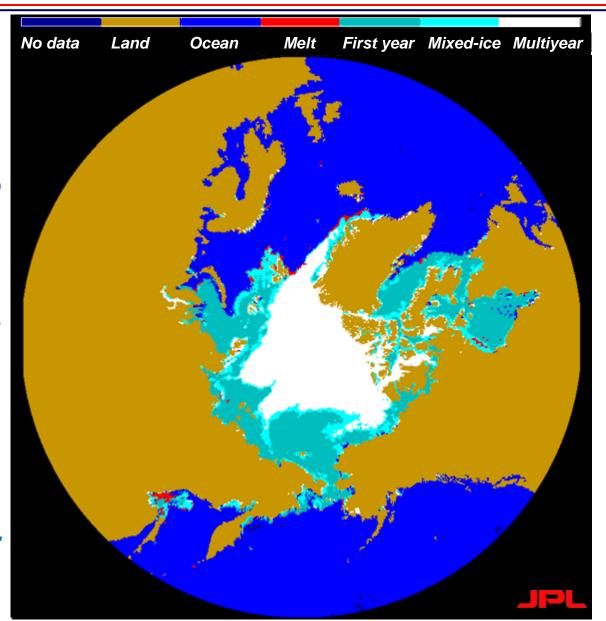
13 October 2009



Arctic Sea Ice Cover on Winter Solstice

Sea ice class distribution on 21 December 2004

Multiyear ice class (white) represents the extent of the oldest and thickest part of the sea ice pack.

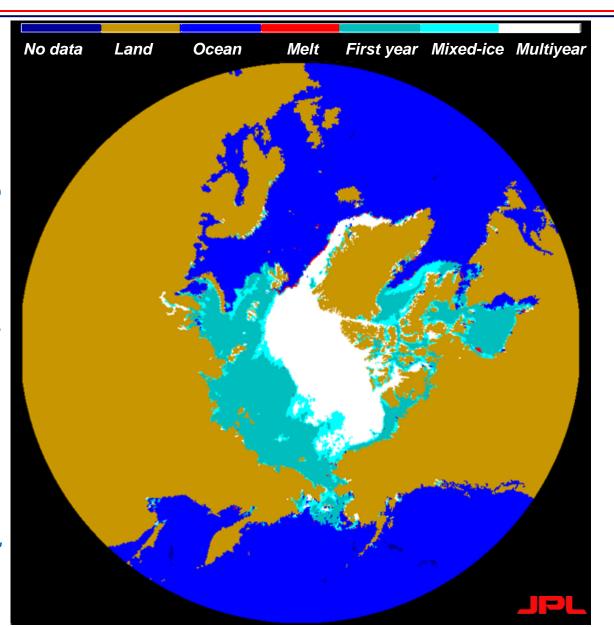




Arctic Sea Ice Cover on Winter Solstice

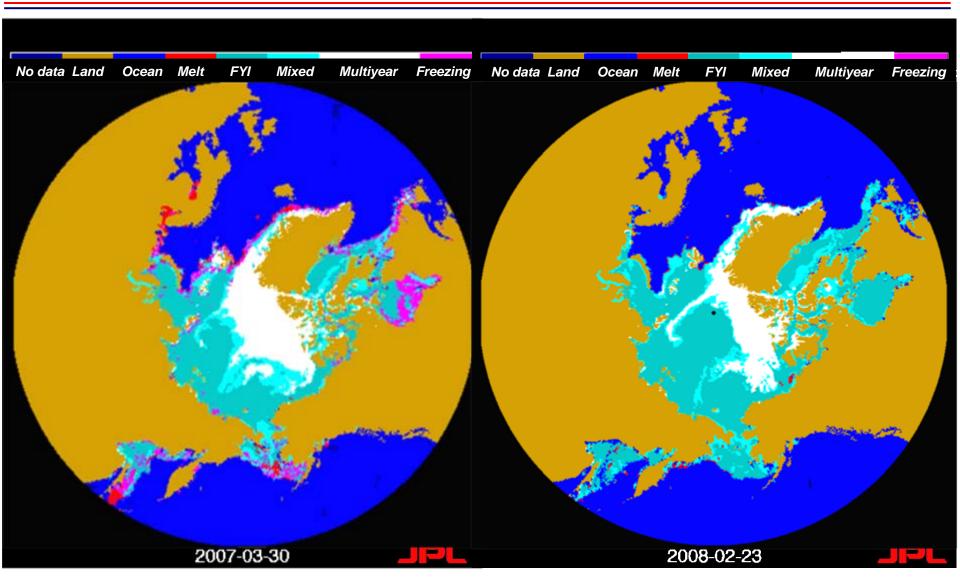
Sea ice class distribution on 21 December 2005

Multiyear ice class (white) represents the extent of the oldest and thickest part of the sea ice pack.



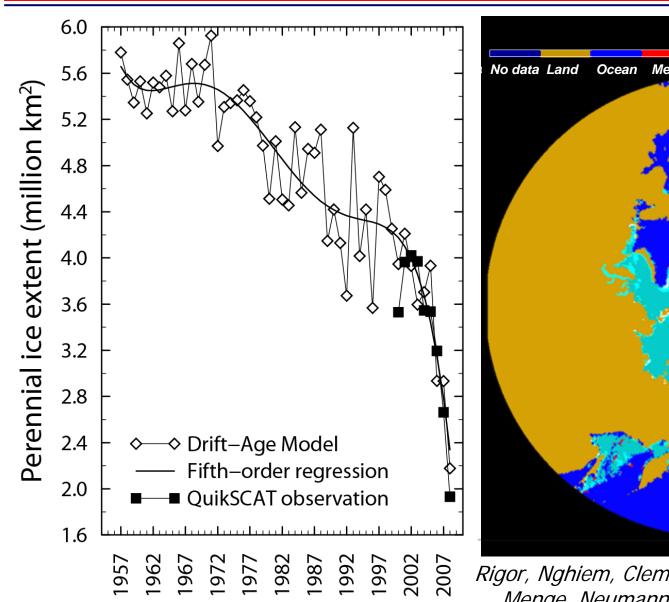


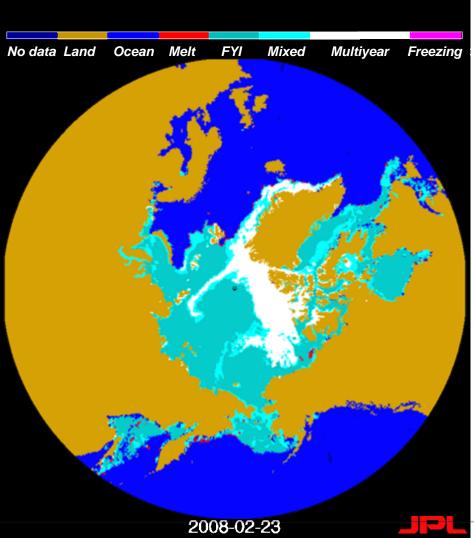
Arctic Perennial Sea Ice Change from Winter 2007 to 2008





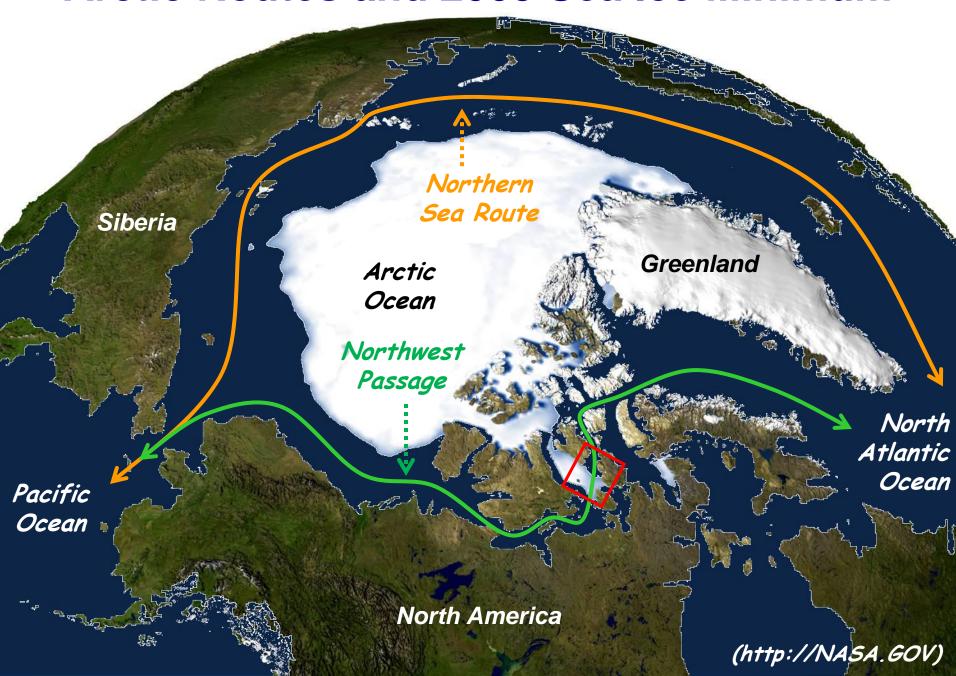
Arctic Perennial Sea Ice Change from 1957 to 2008





Rigor, Nghiem, Clemente-Colón, Perovich, Richter-Menge, Neumann, and Ortmeyer GRL, 2008.

Arctic Routes and 2005 Sea Ice Minimum



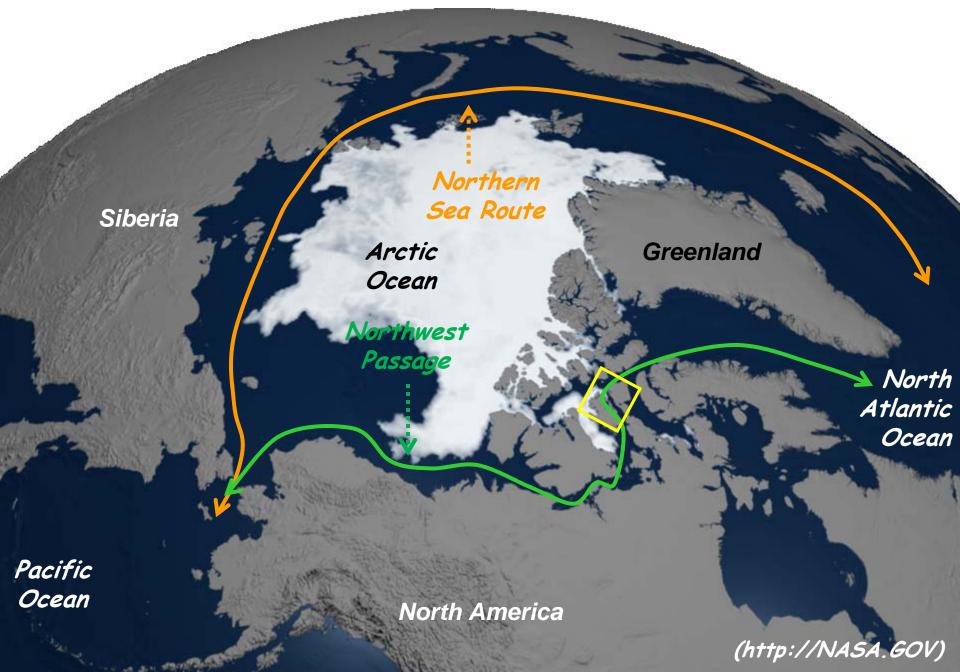
Arctic Routes and 2007 Record Minimum



Arctic Routes and 2008 Sea Ice Minimum



Arctic Routes and 2009 Sea Ice Minimum





Ocean Watch Recovery and Deployment of IABP Buoys





At Gjoa Haven, Nunavut on 21 August 2009 - Sailed through ice bottle neck Stopped in San Juan with crew visit to UPRM on 1-7 November 2009



First Commercial NSR Trans-Arctic Transit

Two multipurpose heavy lift project carriers, M/V Beluga Fraternity and M/V Beluga Foresight, successfully transited the Northeast Passage in summer 2009. Both vessels reached their final destination Rotterdam, with a delivery stop in Siberia, after travelling from Ulsan, South Korea.



What is next and when???





R/V XUE LONG Observed in the High Arctic 14 Miles Away from the Healy in 2008

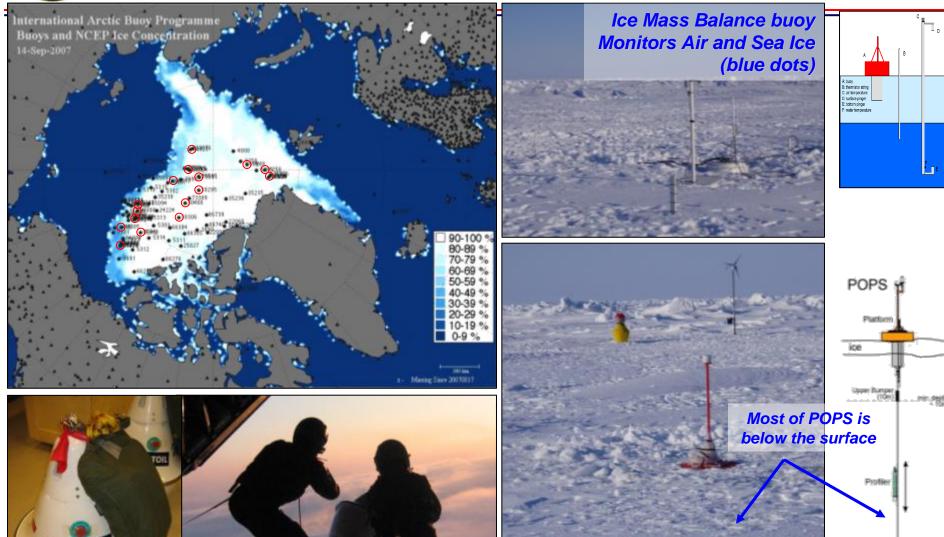
- Chinese-flagged, icebreaking cargo ship modified for research and logistics . It is China's only polar vessel.
- Government-owned, but not associated with the Chinese Navy. It is commanded and crewed by civilians.
- Operated by the Polar Research Institute of China, subordinate to the State Oceanographic Administration.
 - Hosted 110 Scientists and deployed buoys for the IABP.
- Plan for a July-September 2010 Trans-Arctic attempt.







Sea Ice Retreat Imposes a Challenge to IABP



ICEX airdrop buoys are the backbone of the IABP

(red dots)

Polar Ocean Profiling System

(typically deployed w/ IMB buoys)

Monitors Air and Ocean



New Seasonal Ice Beacons, Ocean Buoys, and Deployment Alternatives Needed





Airborne Expendable Ice Buoys (AXIB)

(NOAA SBIR)

Provides a low cost aircraft droppable seasonal buoy (with also surface deployment capability)



Sensors/measuremen ts include surface air temperature, surface pressure, GPS location, and Argos transmitter

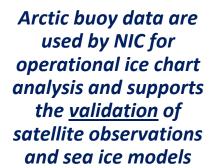


Replaces/Complemen ts present ice beacons providing operation in ice and open water through freeze/thaw cycles



On the ice testing in Lake Champlain, VT and two deployments in the Arctic during HLY0805 NIC co-manages the
US Interagency Buoy
Program with
UW/PSC and
coordinates US Arctic
buoy activities within
the IABP

Arctic buoy data are critical to NWS and many other users providing weather forecasts, NWP, and climate modeling











Deployment of the AXIB Seasonal Buoys From the Healy in 2008













1st Buoy Airdrop by the USCG for the USIABP/IABP – WHITE TRIDENT Alternative

Buoy #89197 72.475N 157.955W 19 August 2009







Coast Guard deploys WOCE buoy in Arctic Ocean

20090819-G-0113H-WOCE Buoy Drop

Video by: Petty Officer 1st Class Jason Yonk

Edited by: Petty Officer 3rd Class Charly Hengen

Created: August 19, 2009

Released: August 19, 2009

Produced by: 17th Coast Guard District Public Affairs, Kodiak

Released by: 17th Coast Guard District Public Affairs, Kodiak

Run Time: 16 sec

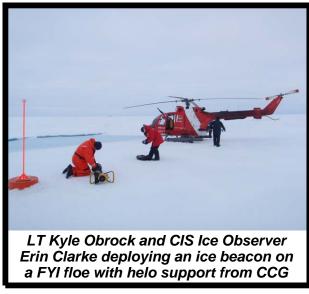


NAIS Coordinated Support of U.S.-Canada UNCLOS Arctic Mapping in 2008 and 2009



Joint US-Canada
Extended
Continental Shelf
Mapping Cruises
HLY0806 and
HLY0905





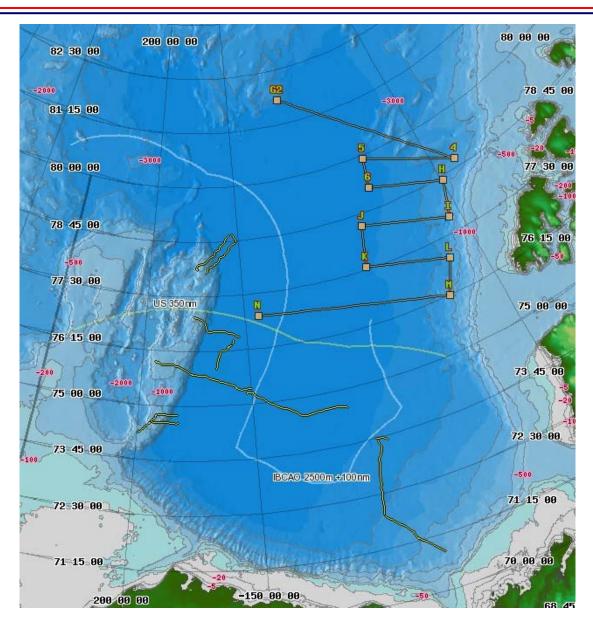






HLY0806 Cruise Track Plan

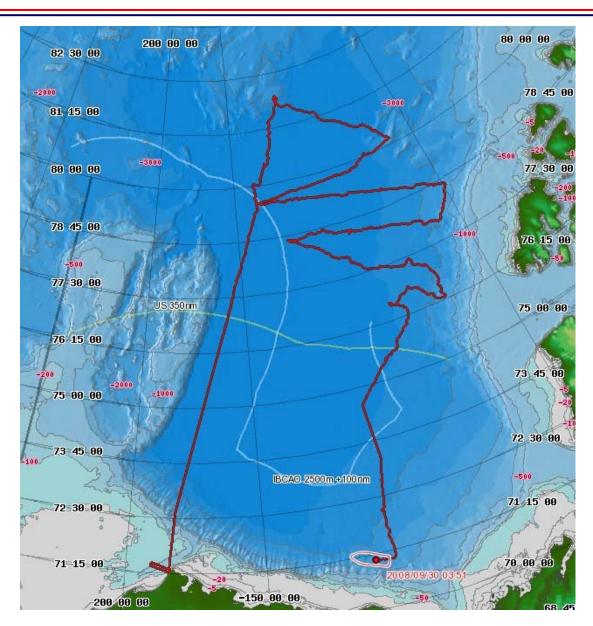






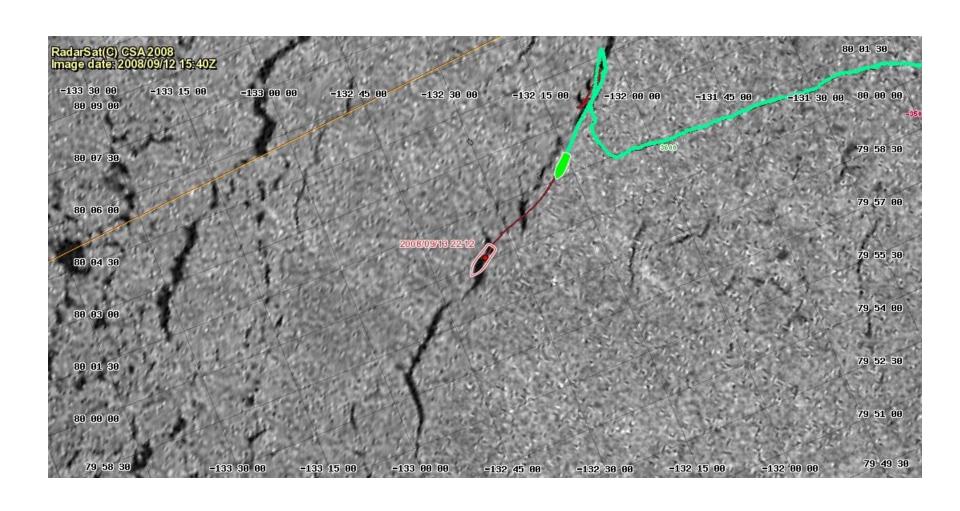
HLY0806 Cruise Actual Track





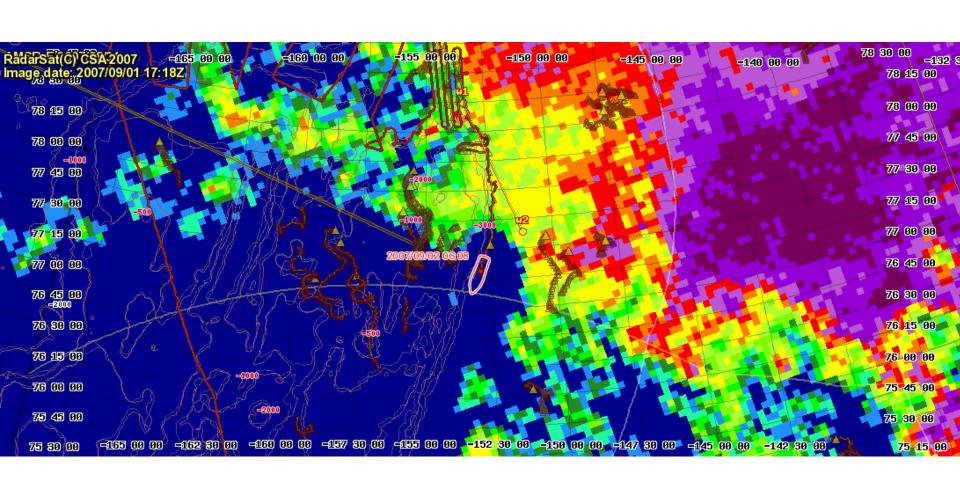


Healy Cruises Exploit Leads using SAR Imagery



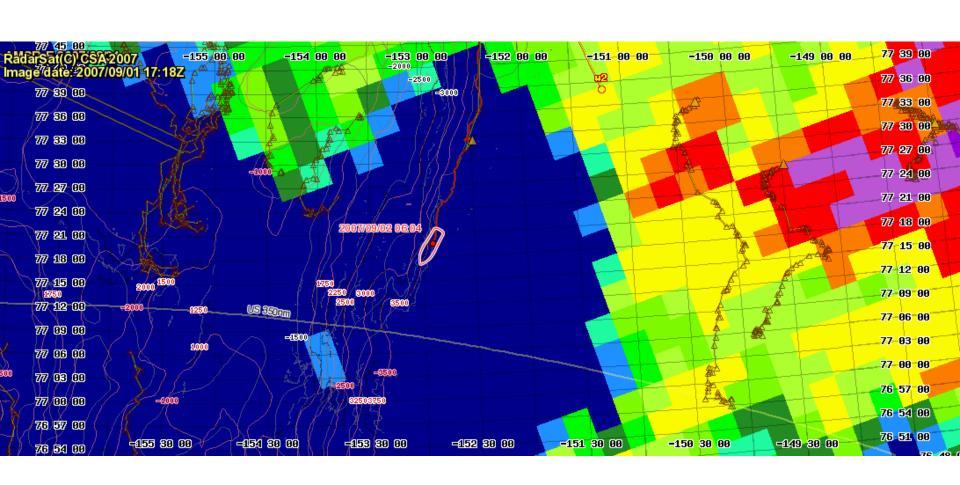


AMSR-E Passive Microwave Sea Ice Concentration



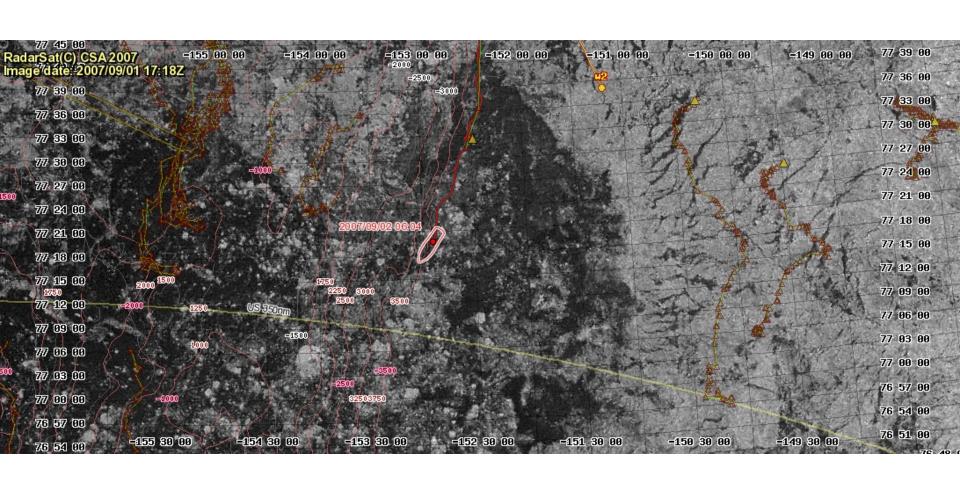


AMSR-E Sea Ice Concentration





RADARSAT-1 Synthetic Aperture Radar Sea Ice Detection







Greenland/Atlantic Icebergs

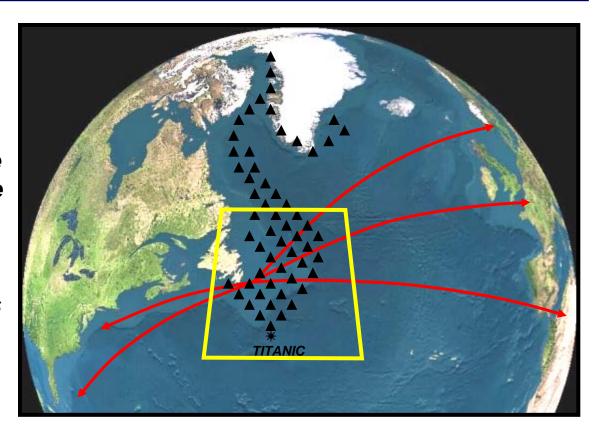


IIP main responsibility.

Under NAIS, IIP and CIS have harmonized and run real-time synchronization of the iceberg databases.

They have joint requirements for reconnaissance flight planning also.

NIC provides NTM iceberg detection support.



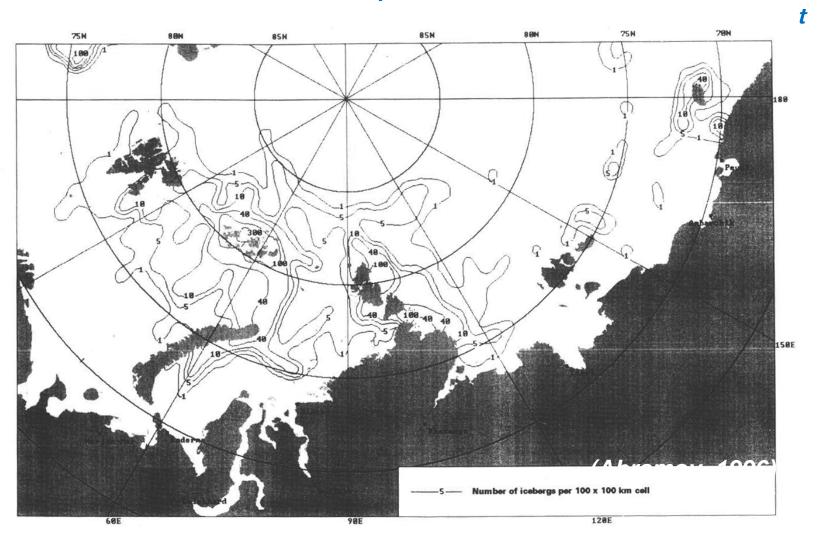






Monthly maximum number of icebergs in August

The present number of icebergs in the Arctic Basin is much larger than that reported





Icebergs in the Arctic Basin – A New Challenge



North-eastern Barents Sea, April 16, 2006



North-western coast of Novaya Zemlya, April 17, 2006



North-eastern Barents Sea, April 17, 2006



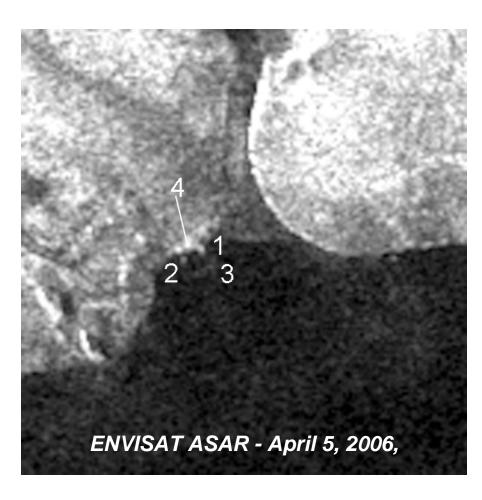
FJL, Salm island, April 25, 2006

Courtesy of Vitaly Alexandrov, Nansen International Environmental and Remote Sensing Center (NIERSC)

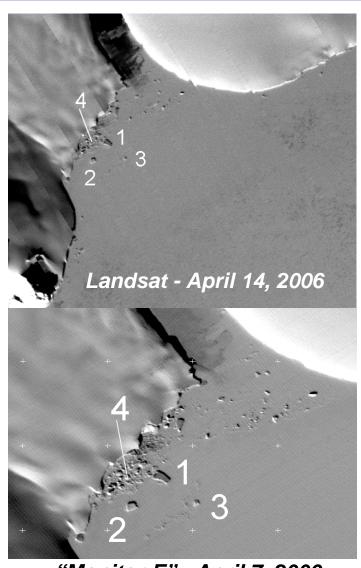


Arctic Iceberg detection

SAR and visible images



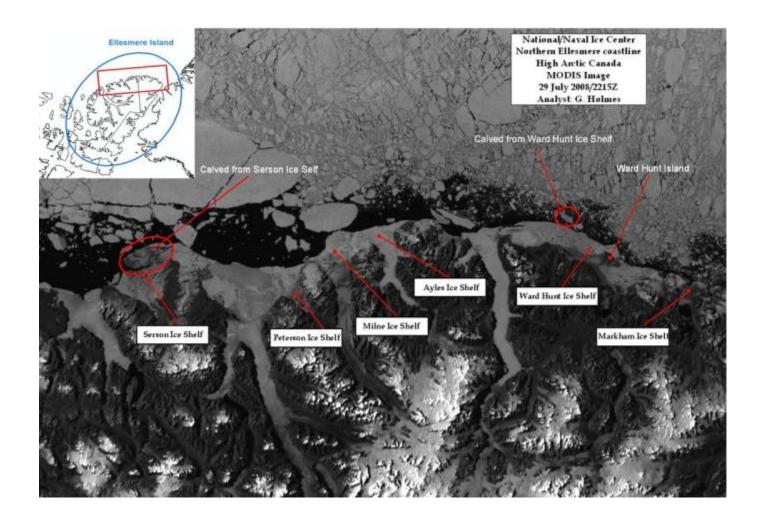
Courtesy of Vitaly Alexandrov, Nansen International Environmental and Remote Sensing Center (NIERSC)



"Monitor-E" - April 7, 2006



Ellesmere Island Icebergs



Ellesmere Is. ice shelves are also calving large icebergs into the Arctic Ocean.



Final Remarks

- Significant changes in the seasonality of Arctic sea ice conditions as well as increased vessel presence in both Arctic and Antarctic waters are posing additional challenges to present operational ice services.
 - Need for increased tactical support, which heavily depends on high-res imagery, particularly from synthetic aperture radar data
 - Need for more frequent and higher resolution nowcasts
 - Need for improved or new forecasting capabilities from daily, weekly, seasonal, intrerannual, to climate time scales
- An ice-diminishing Arctic Ocean does not translate into an "ice-risk" free ocean.
- New strategies for the deployment of in-situ air-sea-ice observing capabilities, improvements of present systems to operate in high-latitude and through new seasonal conditions, and the incorporation of new technologies such as UAS may be needed.

Preguntas?

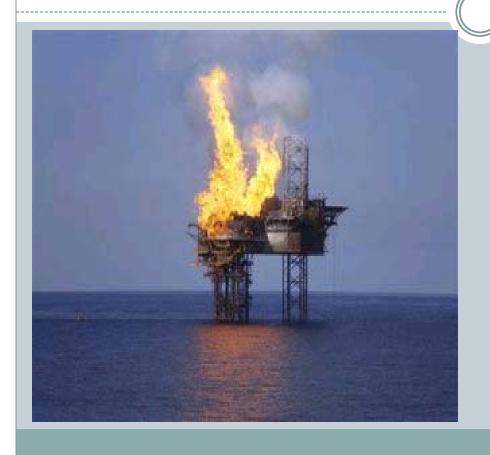


Offshore Renewable Energy Extraction and Transport

BORN READY REQUIREMENTS FOR THE USCG

The Past & Current Missions

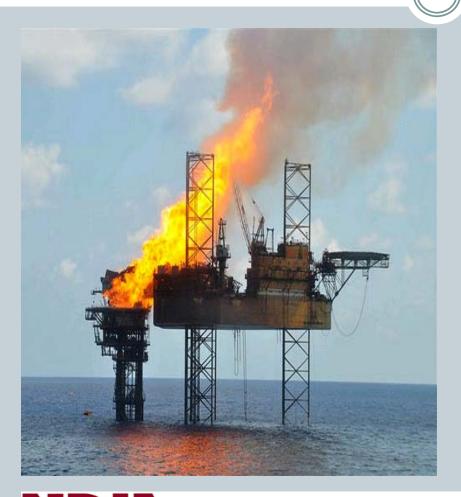
Oil & Gas Platform Fire Control and Rescue



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United States Coast Guard
U.S. Department of Homeland Security

Other Recent Offshore Platform Fires













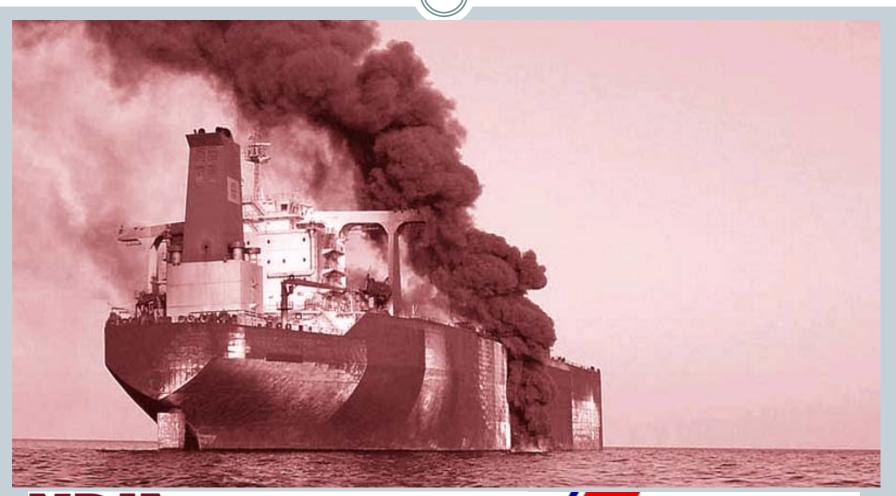
Current Energy Transport







Energy Transport Problems







More Energy Transport Problems



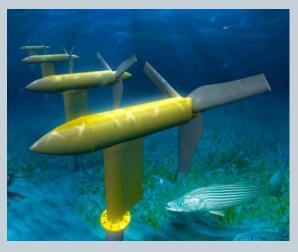




Born Ready - What's Next





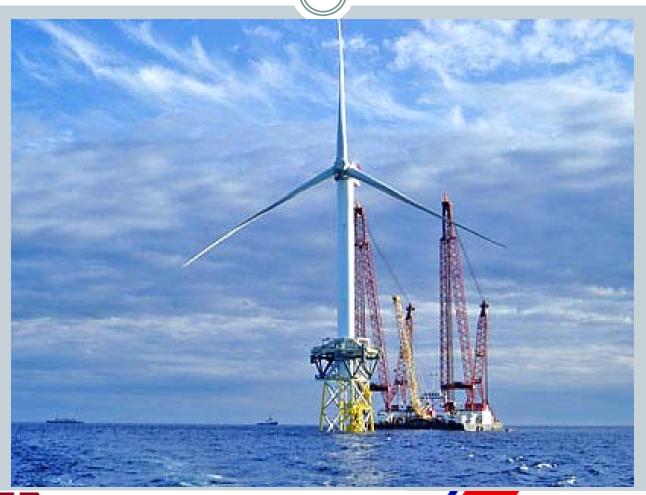








6 Megawatt (and larger) Mega Turbines

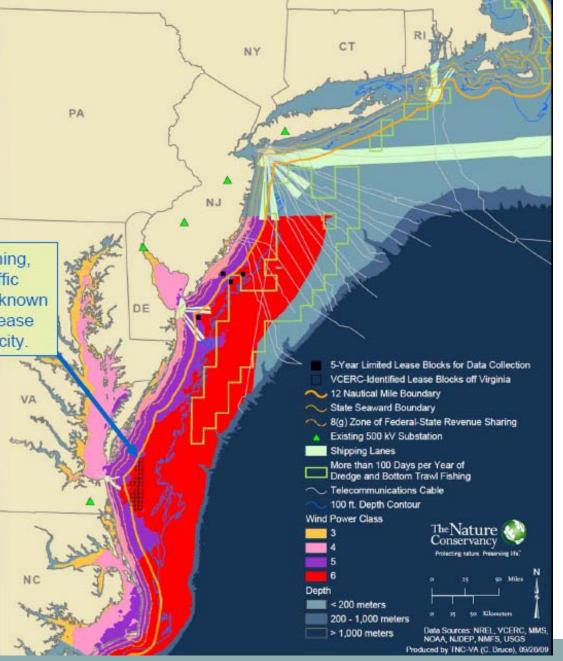






Atlantic Context for Virginia Resource

Avoiding all excluded uses (military training, dredge spoil disposal, USCG vessel traffic separation scheme, and accounting for known shipping traffic density, these 25 MMS lease blocks could support 3,000 MW of capacity.



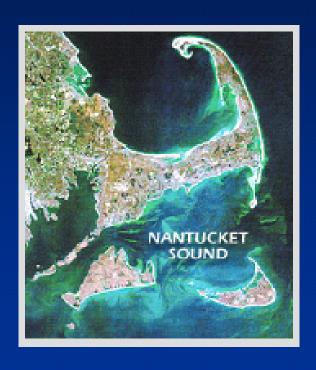
Offshore Wind Can Meet a Large Portion of Virginia's Energy Demand



With wind turbines installed at a density of 10 MW per sq.km, an ocean area of 640 sq.km could produce 21,000 GWh/yr, compared with state consumption of 104,200 GWh/yr in 2005

The proposed offshore wind energy project in Cape Cod, Massachusetts

This proposed project is the America's first and the world's largest offshore wind farm in Nantucket Sound, MASS



Highlights:

130 wind turbines

417 feet tall

Spread over 24 sq miles

Up to 420 MW (3/4 of the cape and Islands electricity needs)



Offshore Turbine Access



Vindeby Wind Farm, Denmark





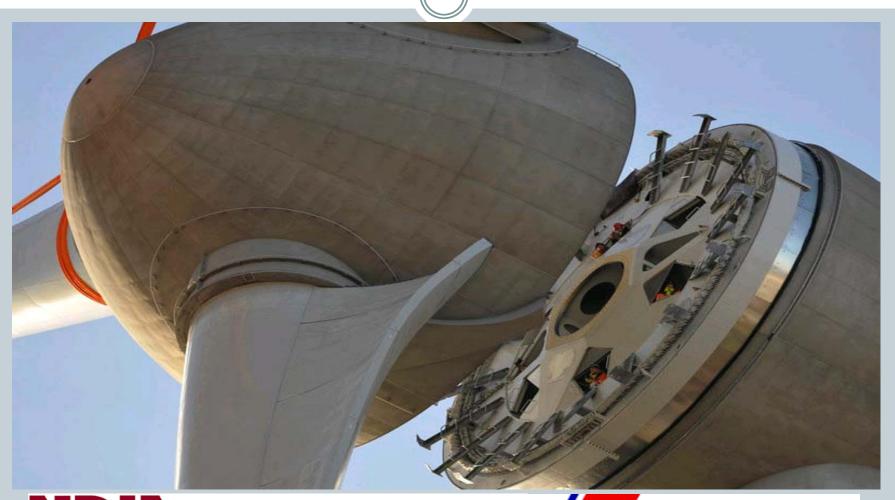


Vindeby Wind Farm, Denmark













Offshore Wave Energy-Surface







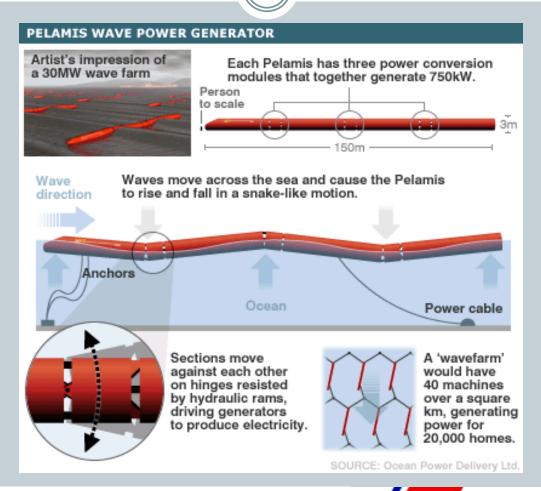
Ocean Surface- Horizontal Systems







Surface Units-475 feet long







Arrayed into Wave Power Farms







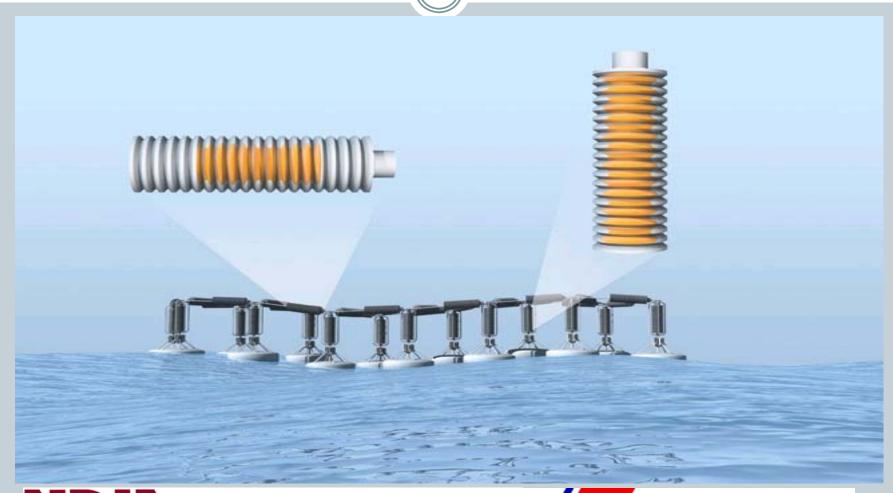
And They Are Already Here







Ocean Surface- Vertical Systems



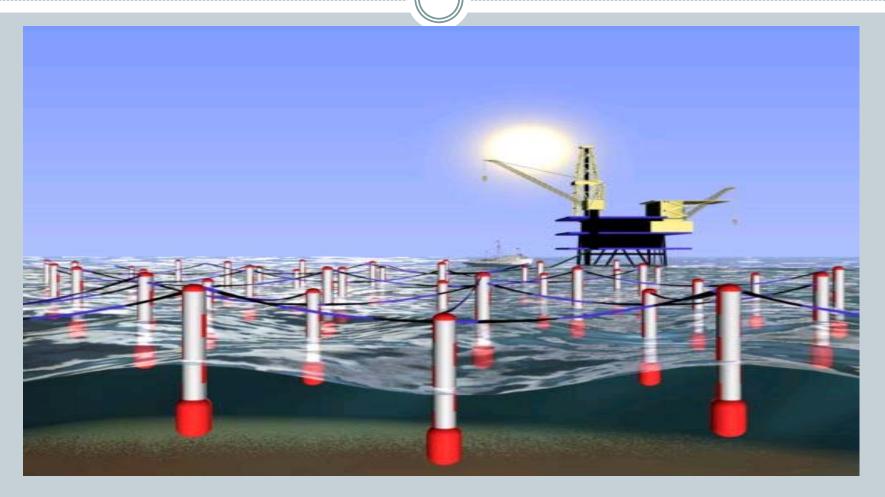
Ocean Surface- Vertical Systems







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Ocean Subsurface-Vertical Systems







Offshore Tidal Power







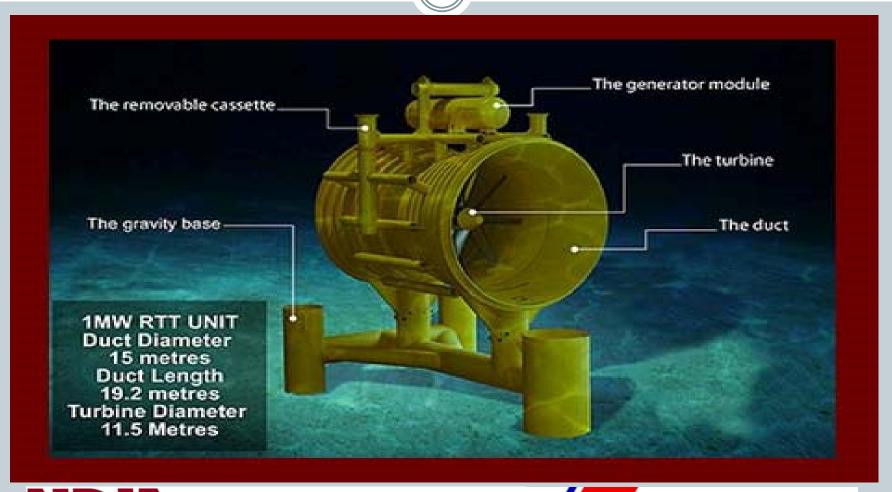
Already Here







Subsurface- Tidal Power







Subsurface- Tidal Power







Ocean Algae Farming







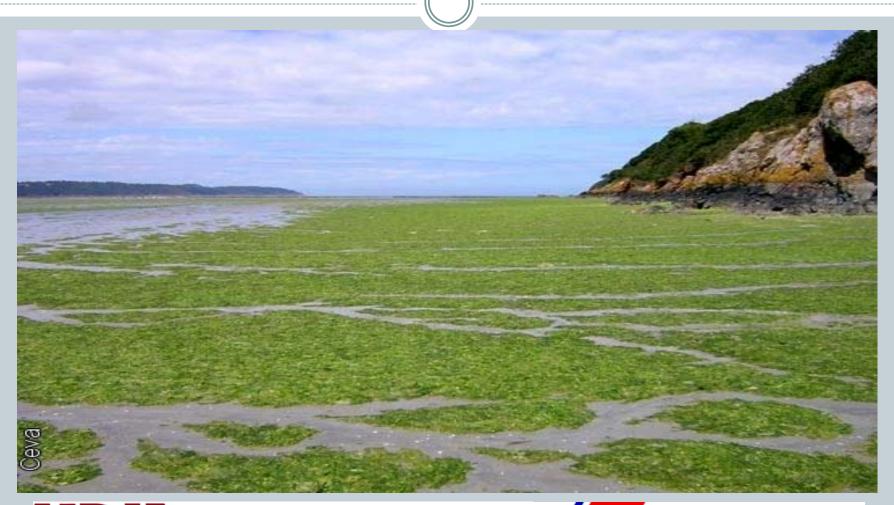
Ocean Algae Farming







Ocean Algae Farming







Algae Harvesting- Already Here











Technology and Offshore Development Forces for Change

CDR Kurt Virkaitis
Secretary of Defense –
Office of Net Assessment

Technology advances and offshore development will significantly impact the Coast Guard over the next 30 years.

- The ocean surface will be less and less anonymous
- Much more will be known about fisheries management
- Oceans will become more crowded with fixed or anchored infrastructure

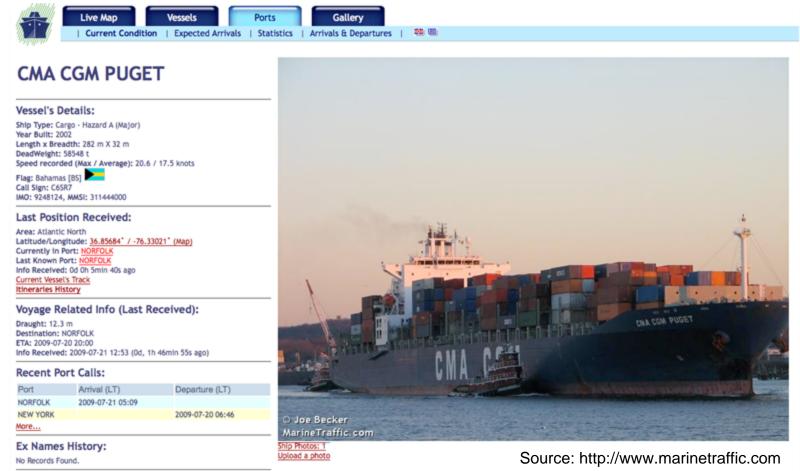
Decreasing Anonymity Automatic ID System (AIS) Vessel Tracking



Source: http://www.marinetraffic.com

Anonymity:

Can zoom from basin to vessel info



Systems likely to become ever more complete, with smaller vessels reporting out of requirement or voluntarily

Eventually the surface will be almost completely transparent

- Data management & analysis will be vital.
 Systems/processes to manage this massive amount of data will be critical to success
- Smugglers will be forced to abandon the surface in favor of the more opaque subsurface environment

Self-propelled semi-submersibles already prevalent



Cost ~\$2 million to build and are disposable

Can land ~10 tons of cocaine worth ~\$200 million



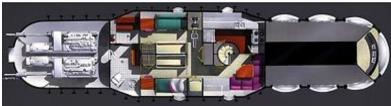
Indigenous sub manufacture is not impossible, but open market purchase is also possible

- Operating Depth ~300 meters
- Length ~120 feet
- Max Surface Speed 16 kts
- Max. Submerged Speed 8 kts
- Surface Range 3000 NM
- Submerged 5 hours at 8 kts
- Cost ~\$20 Million
- Profit is lower, but can avoid capture/detection by diving
- Reusable
- Bad guys get the perk of round trip luxury transport



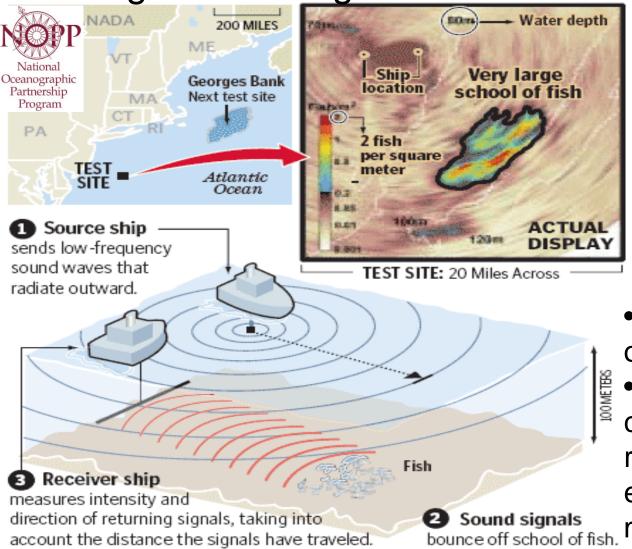






Source:http://seattletimes.nwsource.com/html/businesstech nology/2003783824_luxurysubs11.html?referrer=digg

Transparency: Instantaneous, continuous wide-area detection & imaging by Ocean Acoustic Remote Sensing Acoustic lighthouses with 150 km radius

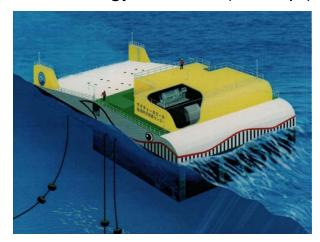


- Powerful tool for fishing or regulating fishing
- Could provide for more catch <u>and</u> better stock resilience; but regs/ enforcement would be more complex

Wave energy machine (concept)

Ocean Crowding

More uses, more users





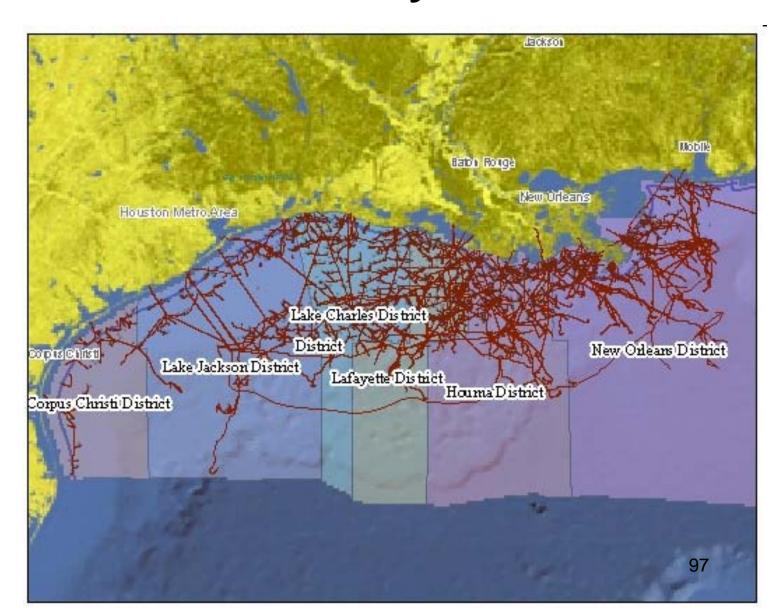




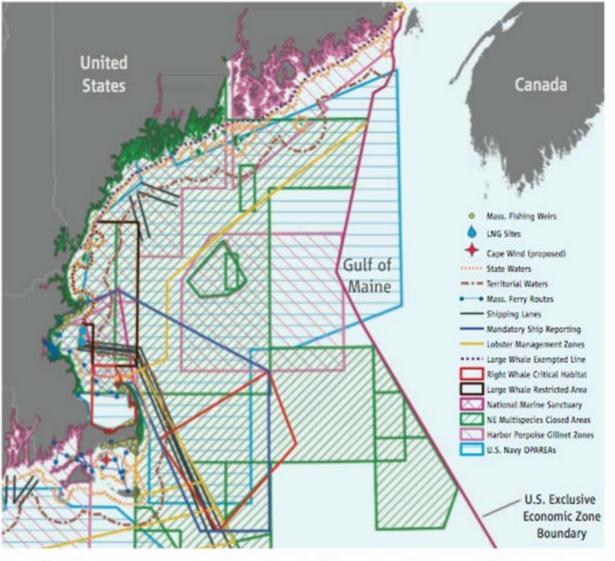
Drilling derricks

Offshore Oil & Gas: Extensive, complex networks offer vulnerability & resilience

Gulf of Mexico pipeline network



- As ocean real estate is developed; regulation will also increase
- This will require
 CG involvement and expertise
- New infrastructure will require some level of protection – Who will do it? Is it homeland security or homeland defense?



Uncoordinated sectoral ocean governance. A cacophony of activities, most regulated by separate federal agencies, crowd ocean waters in the Gulf of Maine. A federal public trust doctrine extended to all U.S. ocean waters would identify these agencies as trustees of the U.S. ocean public trust, unifying them for the first time under a common mandate to manage marine resources sustainably. LNG, liquified natural gas; OPAREAs, Operating areas.

Source: M. Turnipseed et al 2009 (Science)



CDR Kurt Virkaitis, Secretary of Defense – Office of Net Assessment

703-697-1313

kurt.virkaitis@osd.mil



Sensitive – For Internal CG Use Only

USCG 2016

Rapid Surge Capability
Core Maritime Competencies
Member of Intel Community (MDA)
Honest Broker

Coastal & Offshore Waters

- Maritime border security
 - Multi-mission platforms
 - Straddle military-civilian
 - LF Authorities
 - Military Presence
 - SAR
 - Presence in EEZ

Ports, Inland & Inshore Waters

- Nationally Distributed
- Partnerships
- Local Community Integration
- Holistic Maritime Expertise
- ATON Fleet (MTS Support)
- Authorities (COTP/FOSC/SMC/OCMI/FMSC)

Global

- Maritime Governance Experience
 - Maritime Security Experience
 - Peer to most foreign navies
 - Humanitarian Reputation
 - Partnerships
 - IMO Lead

Increasing Recapitalization Timeframes

Increasing Capability Overlap with Partners

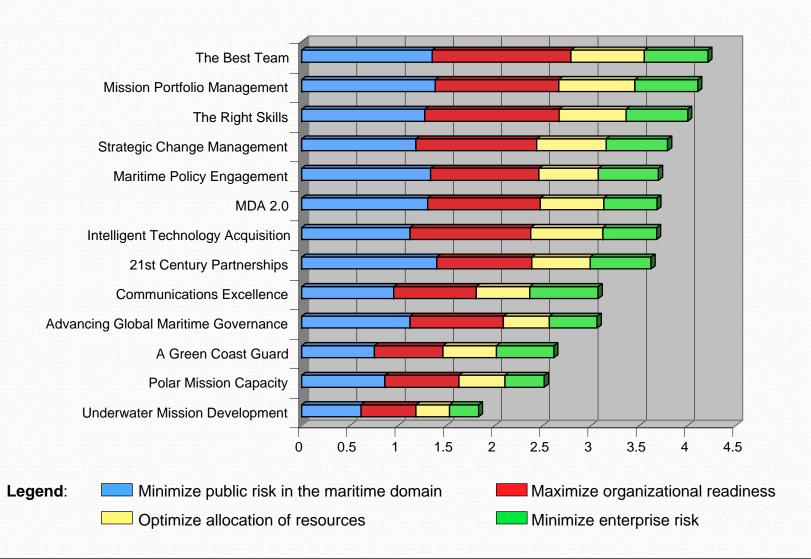
Increasing Coast Guard "Stock Price"

Evergreen Strategies

- 21st Century Partnership
- Advancing Global Maritime Governance
- Maritime Policy Engagement
- Strategic Change Management
- Mission Portfolio Management
- MDA 2.0

- Polar Mission Capacity
- Underwater Mission Development
- The Best Team
- The Right Skills
- Intelligent Technology Acquisition
- Communications
 Excellence
- A Green Coast Guard

Strategy Breakout Session - Strategy Prioritization Results



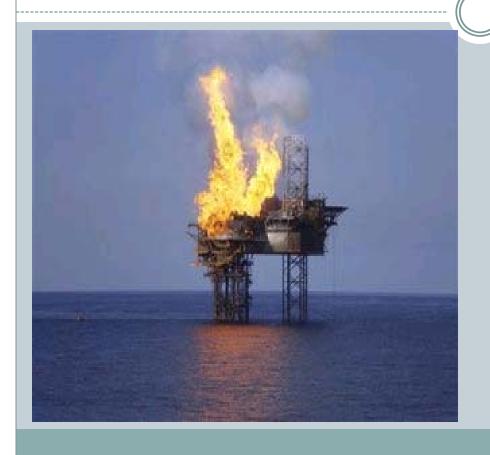


Offshore Renewable Energy Extraction and Transport

BORN READY REQUIREMENTS FOR THE USCG

The Past & Current Missions

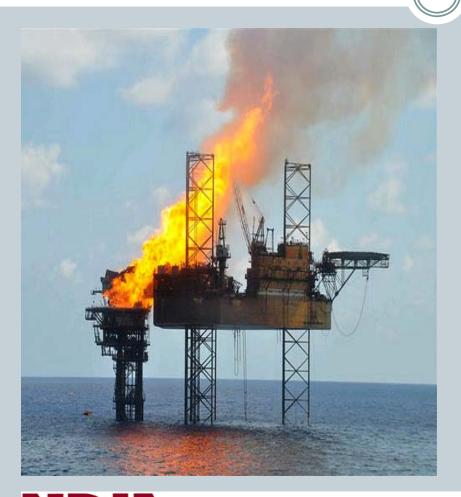
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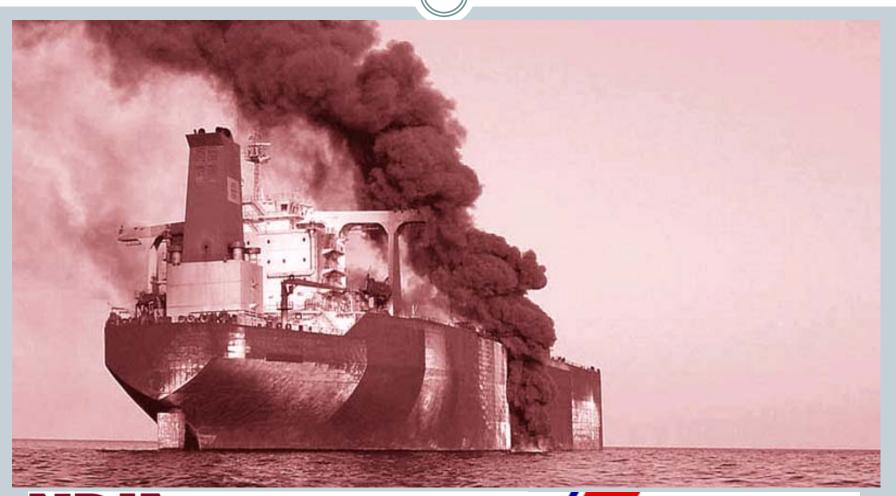
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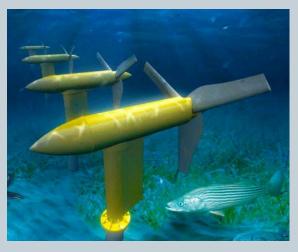




Born Ready - What's Next





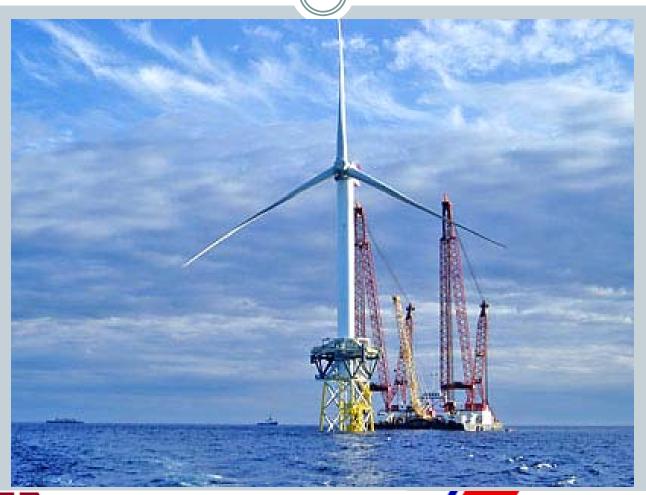








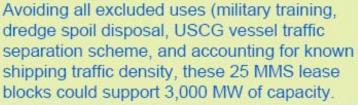
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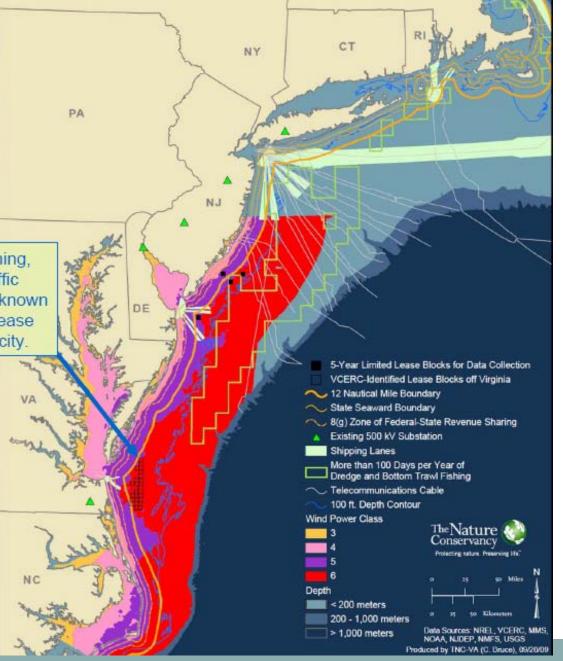






Atlantic Context for Virginia Resource





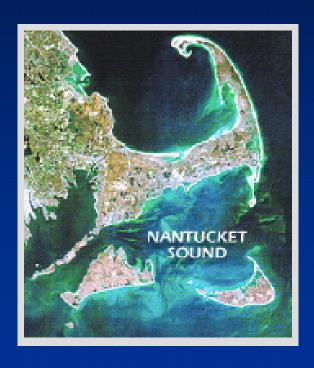
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Highlights:

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417 feet tall

Spread over 24 sq miles

Up to 420 MW (3/4 of the cape and Islands electricity needs)



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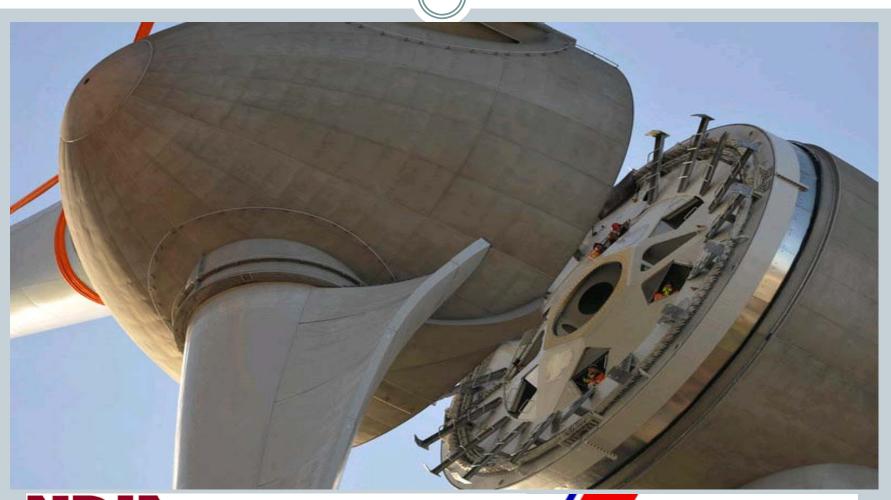


Vindeby Wind Farm, Denmark













Offshore Wave Energy-Surface







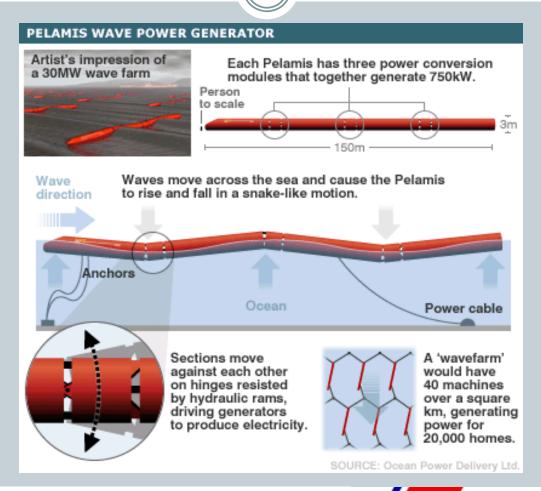
Ocean Surface- Horizontal Systems







Surface Units-475 feet long







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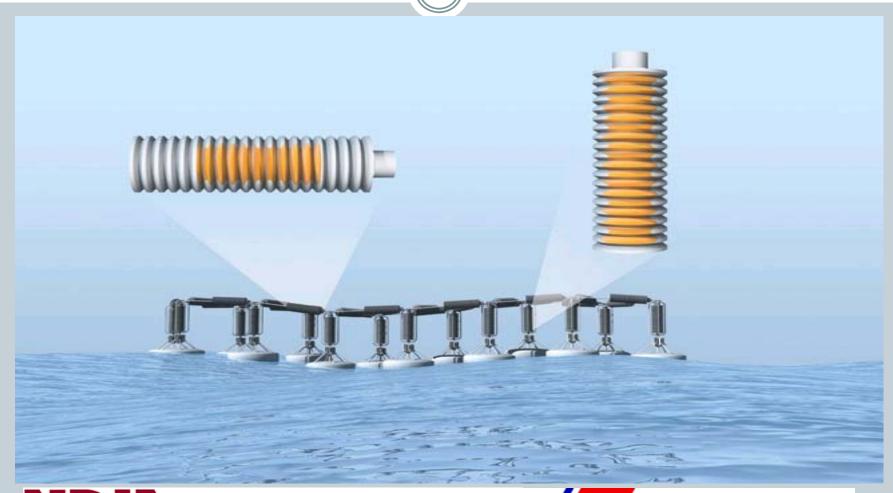
And They Are Already Here







Ocean Surface- Vertical Systems



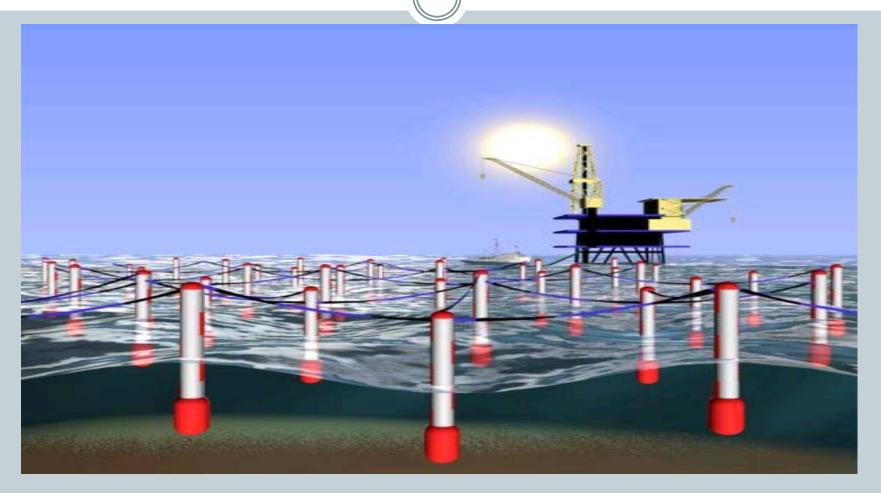
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Ocean Subsurface-Vertical Systems







Offshore Tidal Power







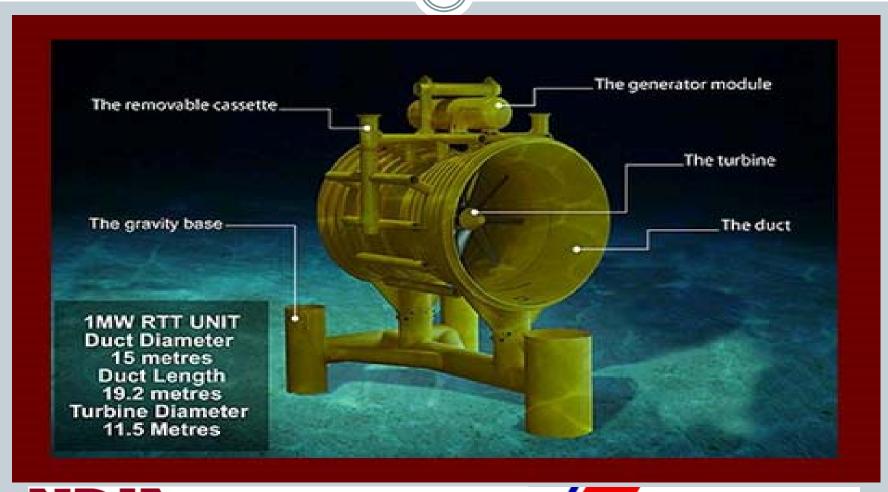
Already Here







Subsurface- Tidal Power







Subsurface- Tidal Power







Ocean Algae Farming







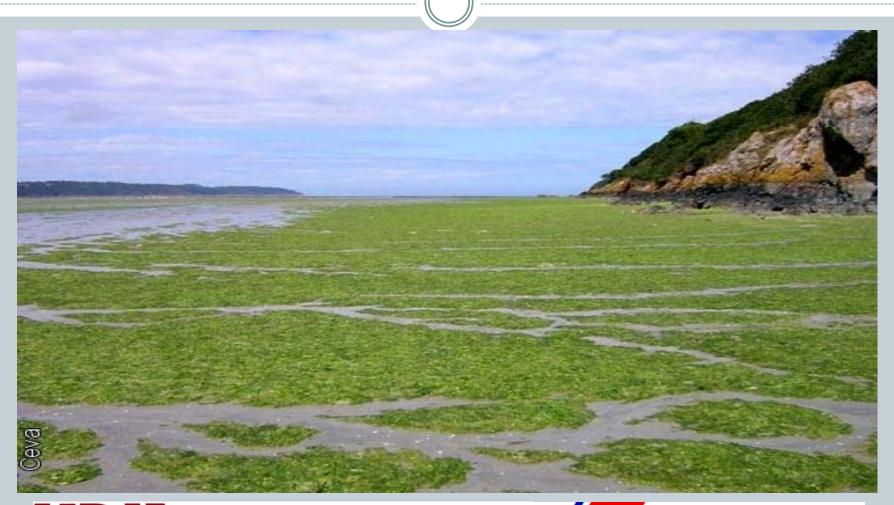
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Algae Harvesting- Already Here





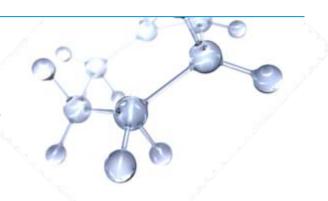




Oil & Gas Overview

Mark C. Gentry, Ph.D., P.E.

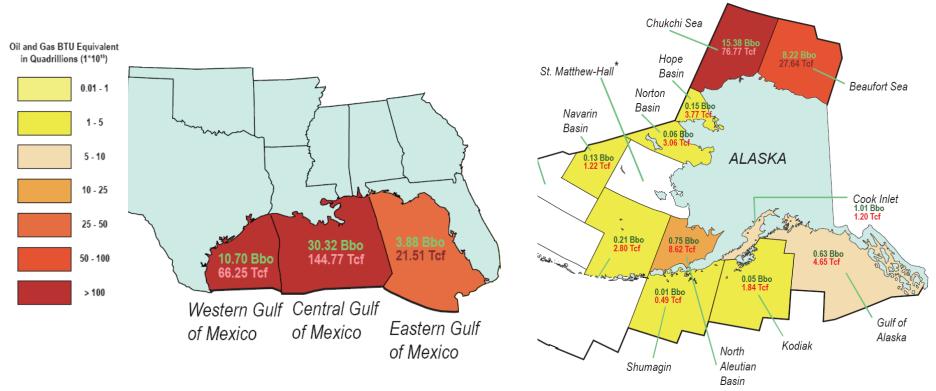
ExxonMobil Upstream Research Company



Resource Base Potential



- Large hydrocarbon resources in the Arctic and deepwater Gulf of Mexico
- High-level interest from the Oil & Gas industry
- Added complexity due to challenging offshore environments



Source: MMS Assessment of Undiscovered Technically Recoverable Oil and Gas Resources of the Nation's Outer Continental Shelf, 2006

Deepwater Marine Activities

Floating Drilling

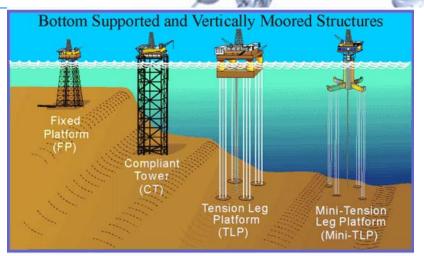
- Stationkeeping
- Re-supply
- Well maintenance/workover

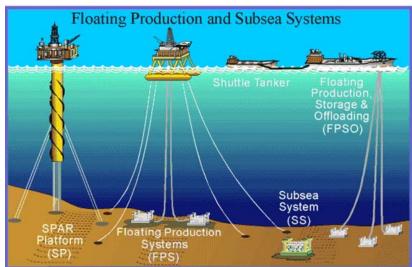
Floating Production

- Stationkeeping
- Well maintenance
- Offloading

Subsea Production

- Well reliability
- Well maintenance
- Subsea equipment

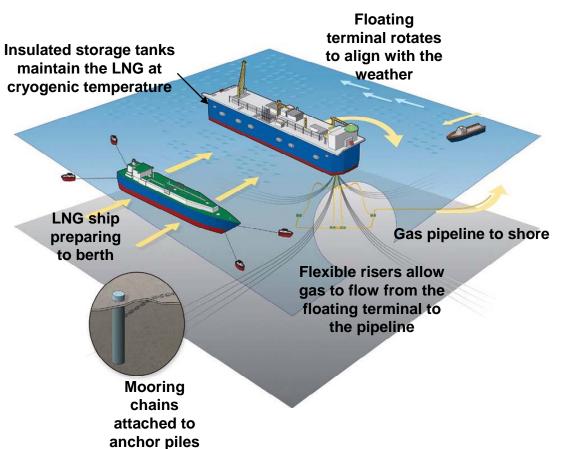




Source: MMS webpage, Deepwater Development Systems

Offshore LNG Terminals





Offshore LNG receiving terminals as an alternative to onshore terminals

- Potential to provide additional energy source to key markets
- Especially in regions where onshore terminal sites are not readily available

Offshore siting considerations include:

- water depth, metocean conditions
- shipping lanes, commercial and recreational fishing
- environmental impacts

Marine safety and security considerations include safety and security zones and coordination of marine operations

ExxonMobil BlueOcean Energy Project offshore NJ/NY

Arctic Marine Activities

Seismic Data Acquisition

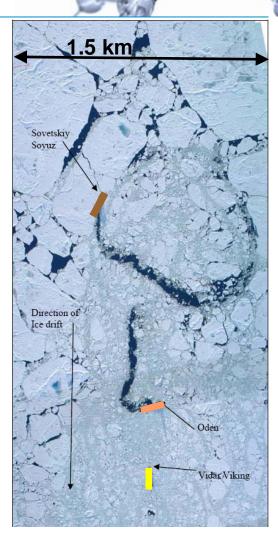
- Seismic acquisition vessel
- Support and scouting vessels
- Icebreaker escort for entry/exit

Exploration Drilling

- Arctic drilling unit
- Icebreaking escort and ice management vessels
- Re-supply and crew change vessels
- Helicopter ice reconnaissance

Arctic Construction Support

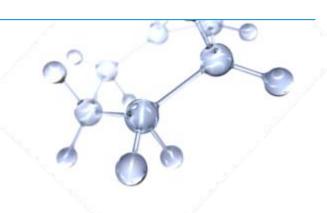
- Sea transports to support pipeline projects
- Barges, tugs, icebreaker escort



ACEX2004: Geotechnical drilling operation with ice management

ExonMobil

Mark C. Gentry, Ph.D., P.E.



Supervisor, Arctic Technology & Metocean, ExxonMobil Upstream Research

Ph: 713 431-7171

Email: mark.c.gentry@exxonmobil.com





Coast Guard Modernization



Where We Are and Where We Are Heading

U.S. Coast Guard...



...Change-Centric Learning Organization

Moderator:

RDML Sandra Stosz Director of Enterprise Strategic Management and Doctrine

1



Panel Members



- DCO RDML Kevin Cook
- Future DCMS Mr. Jeffery Orner
- Future OPCOM Captain Richard Kaser
- Financial Transformation Mr. Martin Rajk
- FORCECOM RADM Timothy Sullivan
- NAPA Mr. Jaime Zamora



Modernization Panel Agenda



- Introductions
- Modernization Overview (10 minutes)
- Modernization Effort Summaries (25 minutes)
 - Deputy Commandant for Operations (DCO)
 - Future Deputy Commandant for Mission Support (DCMS)
 - Future Operations Command (OPCOM)
 - Financial Transformation
 - Force Readiness Command (FORCECOM)
- Panel Q & A (50 minutes)
- Closing Remarks (5 minutes)

- Demand for an organization that is responsive to 21st century threats & hazards.
- Demand for an <u>operational structure</u> that is more agile, flexible, and responsive.
- Demand for improved <u>business</u> and <u>support processes</u>.
- <u>Lessons learned</u> from internal/external studies, GAO & Congressional reports



Outcomes of a Change-Centric Organization



- Make our support systems <u>more</u> <u>responsive</u> to our operators.
- Make our force structure <u>more</u> responsive to mission execution.
- Make our Coast Guard <u>more</u> <u>responsive</u> to our Nation.



Path to a Change-Centric Coast Guard



Visioning and Design

Phase 1

Functional Alignment

Phase 2

Process Engineering

Phase 3

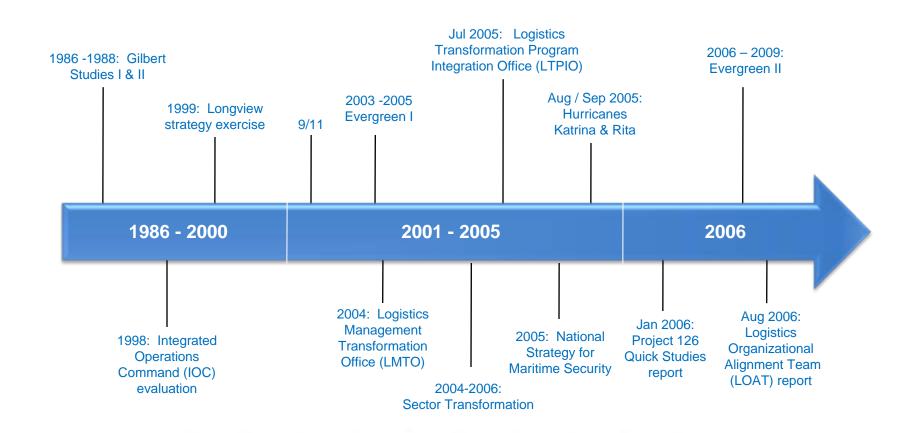
Change-Centric Organization

Phase 4



Foundations of Modernization





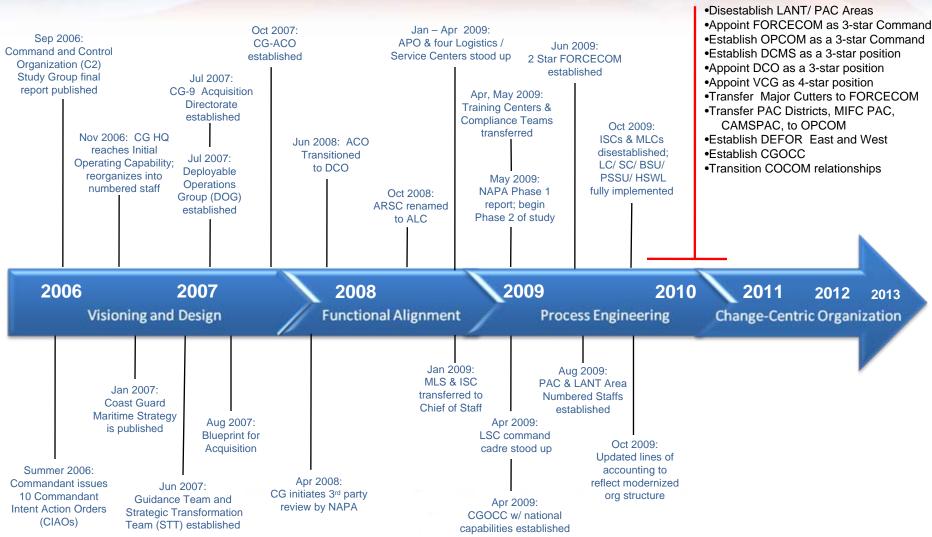
7



Modernization Major Milestones



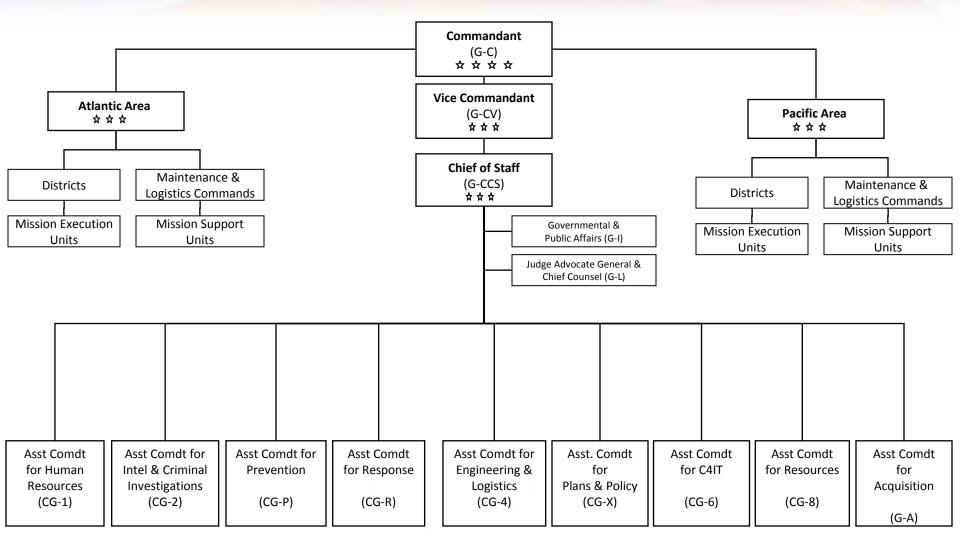
Authorization Bill Enacted (TBD)





Fundamental Design of Pre-Modernized Coast Guard

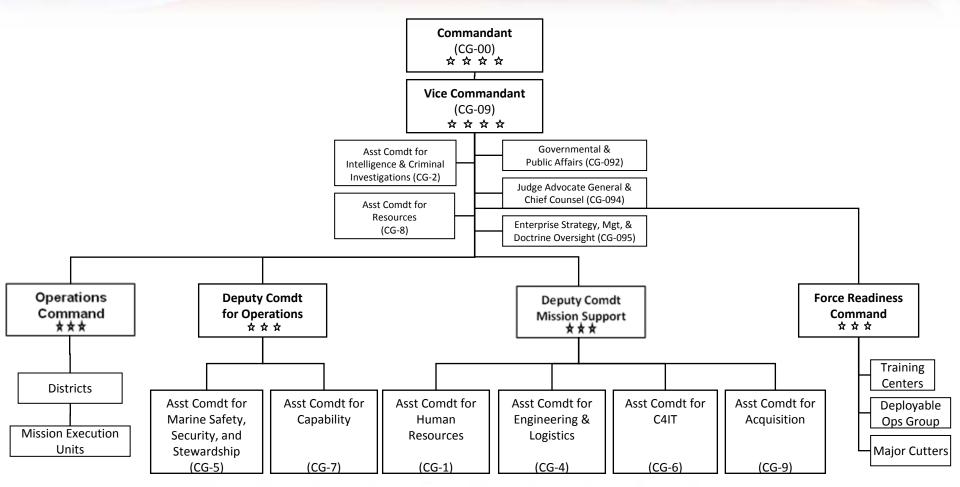


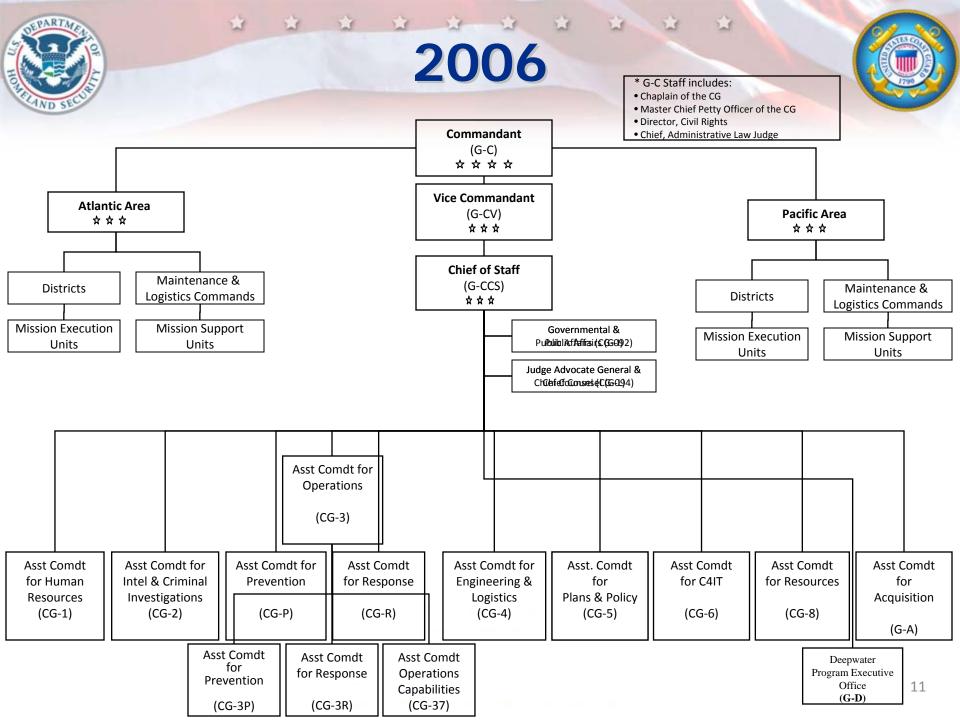




Fundamental Design of Modernized Coast Guard



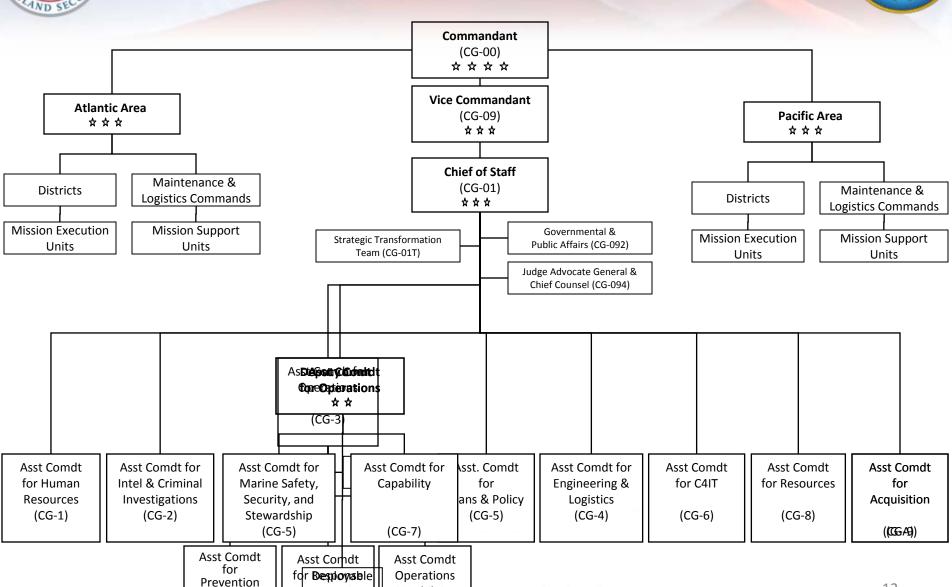






June 2007 – June 2008





Capabilities

(CG-37)

Ops Group

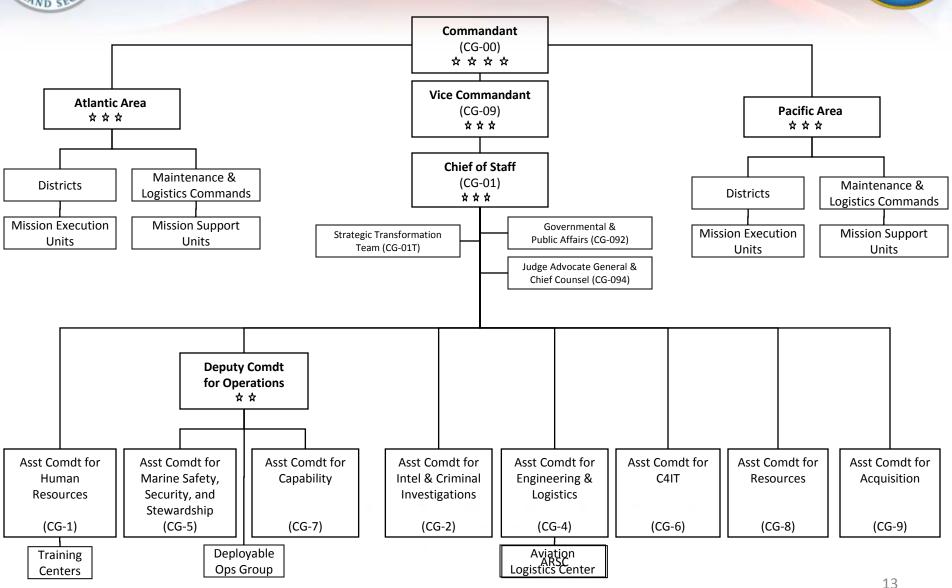
(CG-3R)

(CG-3P)



Oct - Nov 2008

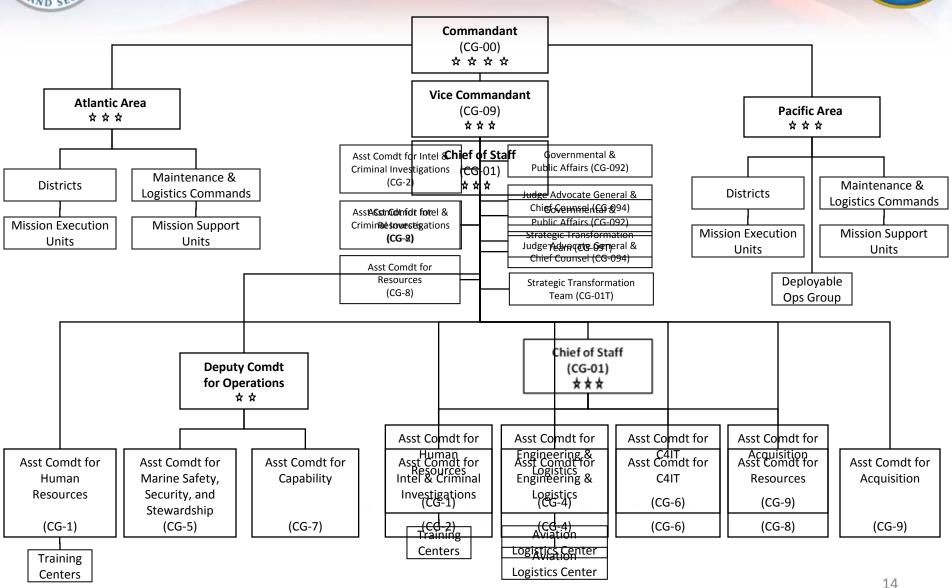






Jan 2009

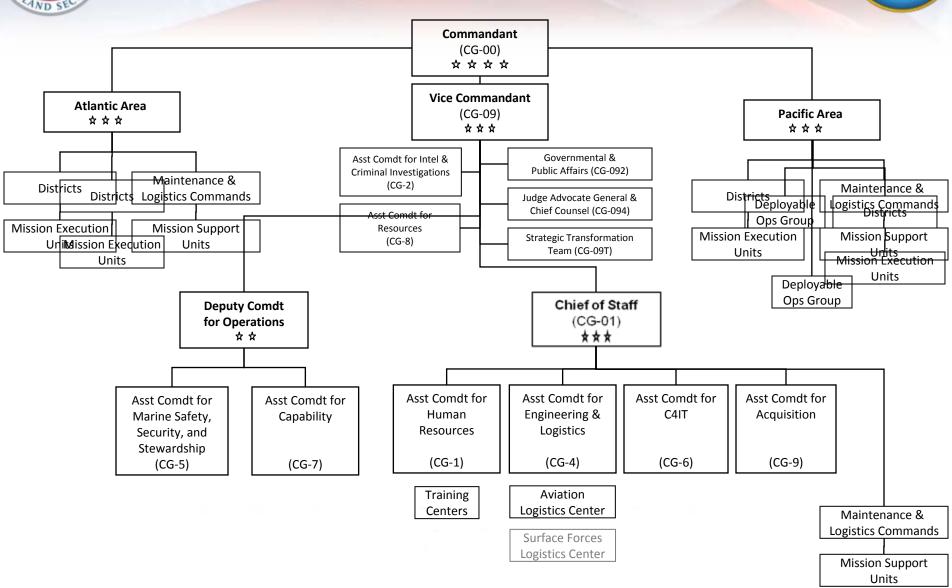






Jan 2009 continued

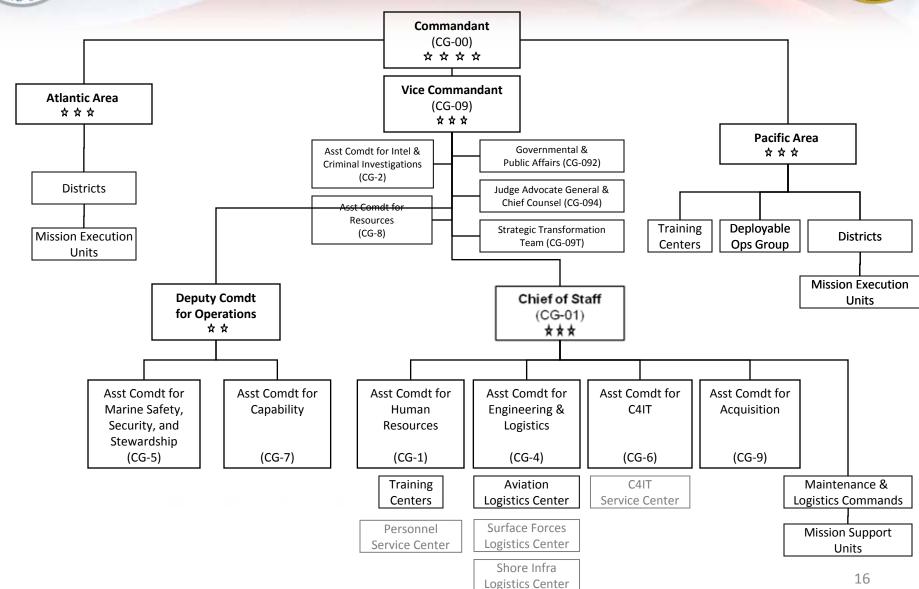






Feb - Apr 2009

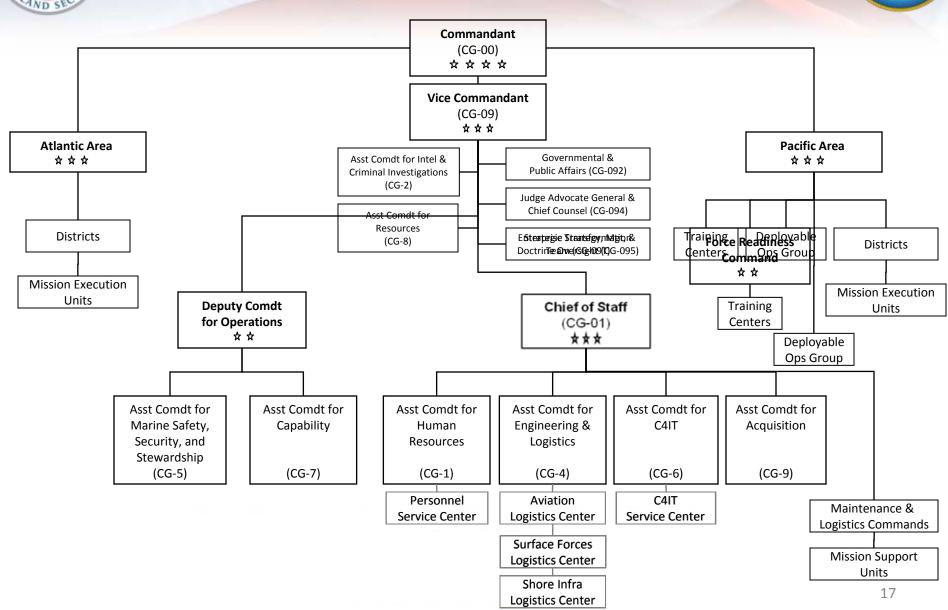






May - Nov 2009



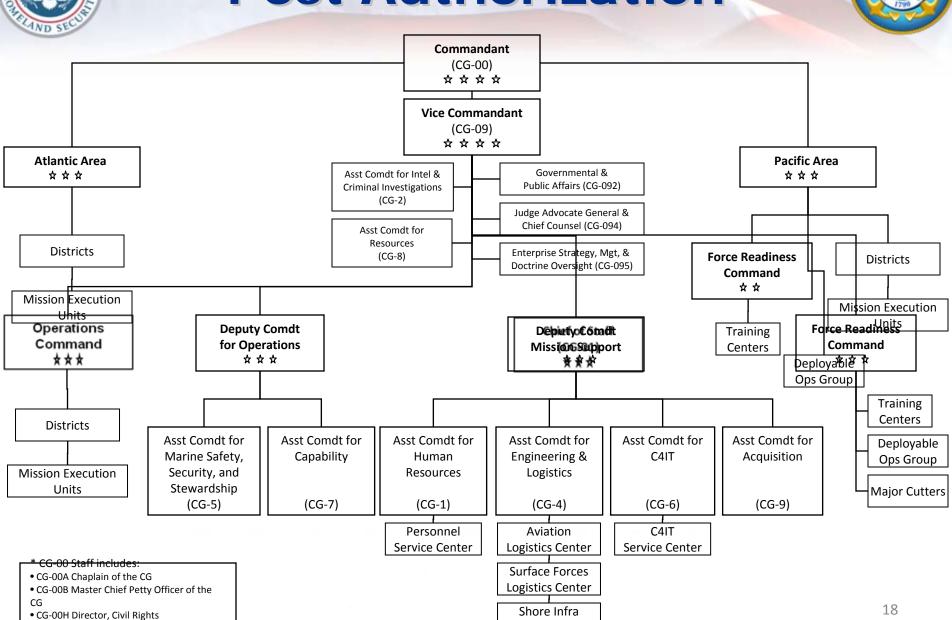




CG-00J Chief, Administrative Law Judge

Post Authorization





Logistics Center



2010, 2011, & Beyond



Process Engineering

- Align Training Teams
- Assess & Align Districts Functions
- Assess & Align Sector Logistics
- Intelligence Integration
- Capabilities Management
- Operational Training, Tactics, Procedures Development
- Implement NAPA recommendations
- Stay on course: Change-Centric Coast Guard



A Modernized Coast Guard





- Regulatory Authority by DCO
- Logistics Support by DCMS
- Incident Command System
 Training by FORCECOM
- Mission Execution & Interagency Coordination by OPCOM





DEPUTY COMMANDANT FOR OPERATIONS (CG-DCO)

Modernization Update

RDML Kevin Cook

Director of Prevention Policy

(CG-54)



DCO Mission & Vision



Mission

DCO will develop and oversee the execution of Coast Guard's strategic-level operational policy, planning, resource acquisition and international engagement.

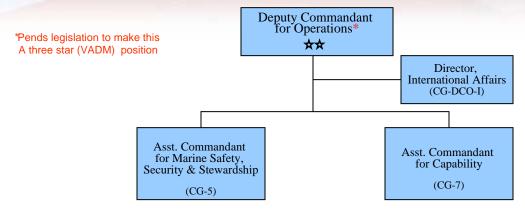
Vision

DCO will align Coast Guard's mission activities, outputs and outcomes to optimize mission execution and thus ensure that the Coast Guard remains the recognized international leader in Maritime Safety, Security and Stewardship.



Coast Guard Deputy Commandant for Operations (CG-DCO)





BENEFITS

- Consolidates all CG operating programs under single Deputy Commandant, increasing operational focus & unity of effort.
- Integrates all operational policy development under single Assistant Commandant for Marine Safety, Security and Stewardship, eliminating overlap and redundancy, and providing clear unambiguous guidance to the field.
- *Improves* capabilities requirements generation for all Coast Guard operating programs, centralizing these functions under a single Assistant Commandant for Capability.
- *Incorporates* the International Affairs Directorate and functions into the new CG-DCO organization, improving the link between operational policy and international engagement.
- Enhances Headquarters alignment with the new Sector field operations organizational structure, clarifying mission ownership and improving the flow of policy, plans and resources from Headquarters to the field.



Deputy Commandant for Operations (CG-DCO) Milestones





Pre 2004

Transitioned
G-O & G-M to
Prevention &
Response

Version 1.0;
"Integration"
CG-5 & CG-7
International Affairs

2005

Merged
MSOs &
Groups into
Sectors

2004-2006

Established CG-3; 3P, 3R, 37 "Merger"

2006

2007

DCO Version 1.2 "Divestment" 3000+ billets

2008-2009

Before

- •Multiple field units in same AOR
- Separate O and M chains of command and HQ Programs
- Mission/Policy Overlap
- •Multiple CG Spokespersons

<u>Today</u>

- One Senior Leader Directs All Operational Policy
- •Integrated & Aligned Mission Execution
- •Consistent Structure
 Throughout Entire Service

Proposed DCO Version 2.0 "Alignment"

2010



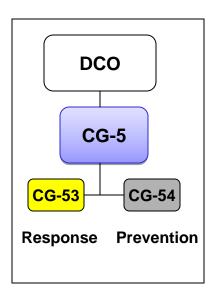
The Ops Alignment Picture

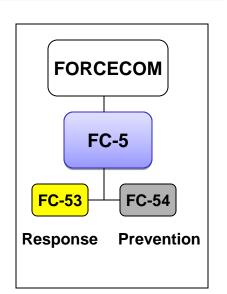


Ops Policy

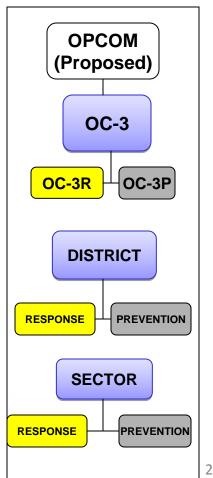
Ops Doctrine/TTP

MISSION EXECUTION





CG-5 aligns structurally with FC Doctrine and OC Mission Execution, clarifying ownership and improving the flow of policy, plans and resources to the field.





DCO Version 1.2





Consolidates all HQ Operating Programs under DCO, Improving Operational Focus and Unity of Effort

Centralizes Ops Resource Planning, Programming &

DIRECTOR OF

OPERATIONS RESOURCE
MANAGEMENT

(DCO-R)

Budgeting, Linking Strategy to Resources

DEPUTY COMMANDANT FOR OPERATIONS (DCO)

RADM Brice O'Hara

International Affairs under DCO Improves the linkage between Policy & International Engagement

> DIRECTOR OF INTERNATIONAL AFFAIRS (DCO-I)



Integrates all Ops Policy under CG-5, Eliminating overlap and Redundancy



GS-15

ASST COMMANDANT FOR MARINE SAFETY, SECURITY AND STEWARDSHIP (CG-5)



ASST COMMANDANT FOR CAPABILITY (CG-7) Centralizes and Improves Capabilities Requirements under CG-7

DIRECTOR OF ASSESSMENT, INTEGRATION AND RISK MANAGEMENT (CG-51)



DIRECTOR OF COMMERCIAL REGULATIONS AND STANDARDS (CG-52)



DIRECTOR OF RESPONSE POLICY (CG-53)



DIRECTOR OF PREVENTION POLICY (CG-54)

Completes HQ Alignment with Field Operations Structure





Future DEPUTY COMMANDANT FOR MISSION SUPPORT (CG-DCMS)

Modernization Update

Mr. Jeffery Orner

CG-4D



DCMS Mission & Vision



Mission

DCMS will enable Coast Guard Mission Execution and advance Coast Guard's Maritime Strategy by fostering a professional workforce capable of delivering "Best In Class" capabilities that maximize Coast Guard readiness.

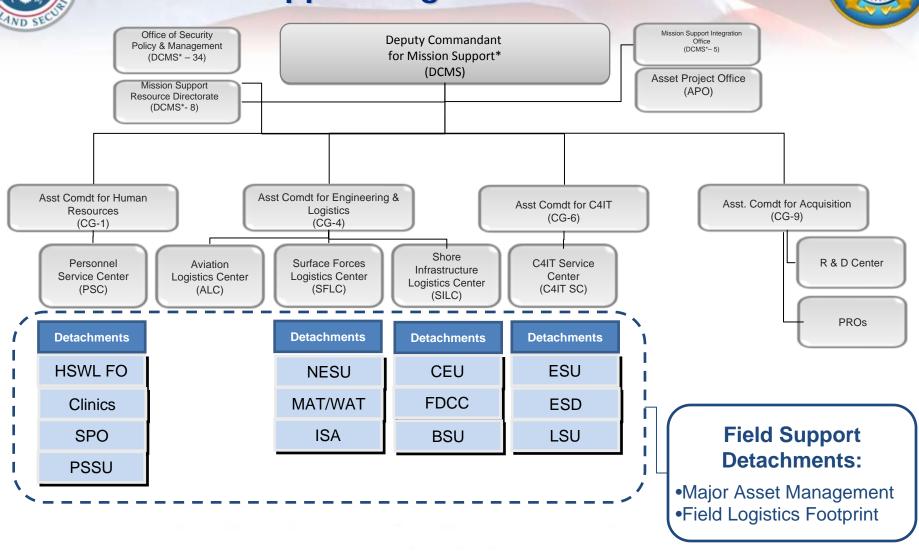
Vision

All people, all platforms, all systems, and all missions always supported.



Mission Support Organization: Version 1.0



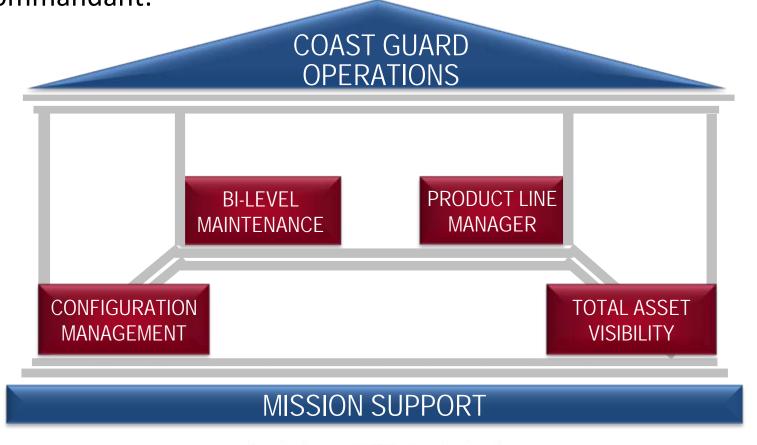




The Four Cornerstones



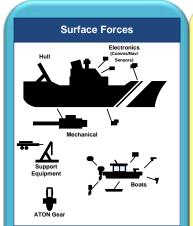
Process transformation will deliver the following Four Cornerstones of the Logistics Business Model identified by the Commandant:





Everybody Owns Mission Support



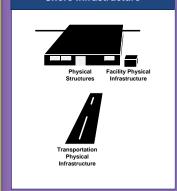


Cutters, Boats, and all attached comms, sensors, and electronics

Aviation Avionics (Communitary Sensors)

Airframes and all attached comms, sensors, and electronics

Shore Infrastructure



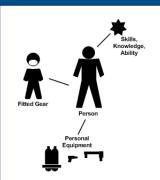
All physical structures plus facility support and transportation infrastructure

C4IT Service Center



All information infrastructure not physically attached to a moveable asset and Standard workstation

Personnel Service Center



Military personnel recruitment through retirement support

Who do I call if my cutter, Helo, building, or computer isn't working right or if I need to go to the clinic?

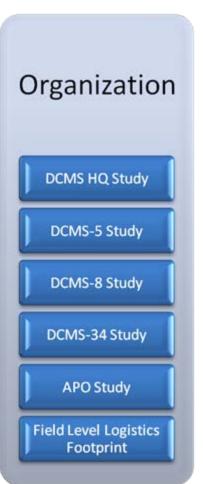
- 1.Call the old POC
- 2.Call the <u>Product Line Manager</u> (PLM) for the asset
- 3.Call the Primary Support Office in my District



Version 2.0 Evolving Mission Support Processes













Evolving Mission Support



Priority Issues

Version 2.0

■I-Team: Field Mission Support Delivery Integration Team

■I-Team: HQ Modernization Study

■I-Team: APO Study

■I-Team: DCMS-34 Study

■I-Team: DCMS-5 Study

■I-Team: DCMS-8 Study

DCMS Headquarters Alignment Field Support Construct

1 Product Line / Logistics and Service Center

SILC

Product Line

Development

Stand Down of MLC/ISC/ HSC Other Initiatives

Business Model Implementation

Human Capital Planning

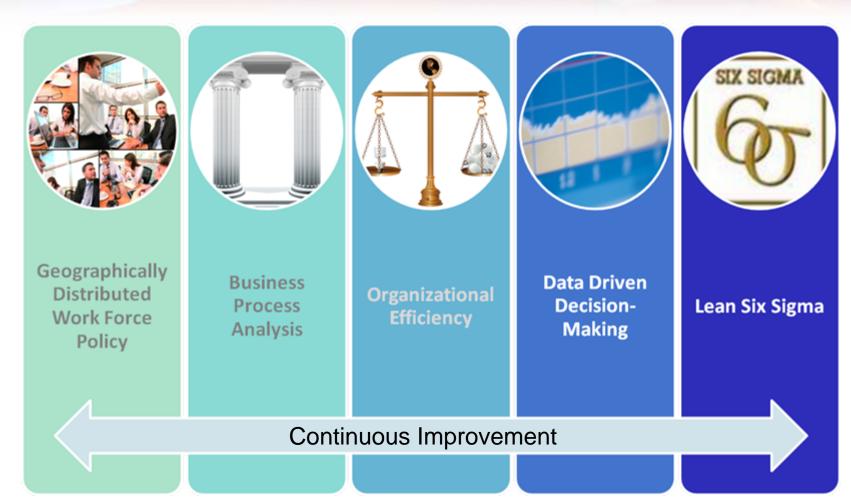
DCMS User Manual

DCMS Strategic Plan



Sustainable Mission Support





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Future COAST GUARD OPERATIONS COMMAND (CG OPCOM)

Modernization Update

Captain Richard Kaser

Chief of Staff, Atlantic Area



OPCOM Mission



Mission

OPCOM will be the Coast Guard's
Global Operational Commander
responsible for executing the Coast
Guard's Strategy for Maritime
Safety, Security, and Stewardship in
order to safeguard the Nation
against all threats, hazards, and challenges
in the maritime domain.



OPCOM Vision



<u>Vision</u>



OPCOM will attain and sustain superior mission execution across all Coast Guard missions by linking the strategic and tactical levels of maritime operations.



OPCOM Implementation Progress



Pre-Authorization:

- Numbered LANT Construct (New Capabilities)
 - Established a Director of Operations and Director of Staff
 - Established a Requirements and Analysis Division
 - Established a Preparedness Division





- LANT Command Center
 - CIP/COP CG NCC
 - 10 person Watch
- Increased Synergy
 - NAVCEN ISPLO



OPCOM Implementation Major Initiatives



Upon Congressional Approval:

- Disestablish Atlantic Area
- Divest:
 - Major Cutters
- Add
 - Maritime Intelligence Fusion Center Pacific
 - Communications Area Master Station Pacific
 - Pacific Area Districts
- Assume
 - Defense Forces West
 - Regional Combatant Commander's Principal Planning Agent





The New Construct in Action



- Mission Cognizance
 - Integrated Operations Command Center
- Analytic Studies and Decision Making
 - District Alignment Study
 - Boat Study
 - LORAM
- Better Coordination
 - LANT-51
 - LANT-53
 - LANT-8







FINANCIAL TRANSFORMATION Modernization Update

Mr. Martin Rajk

CG-8D



CFO Mission



The CFO serves as a trusted strategist and financial advisor to the Commandant and senior leadership. The CFO is the Service financial management technical authority to direct financial management activities, modernize financial management systems and strengthen reporting through integrated business processes and solutions.



CFO Vision



A world-class financial management enterprise that enhances premier mission execution.









CFO Major Initiatives 2010-2011



- Enhanced/expanded capacity and capability
- Alignment of asset, acquisition and financial management
- Extending audit readiness











COAST GUARD FORCE READINESS COMMAND (CG FORCECOM)

Modernization Update

RADM Timothy Sullivan

Commander, Force Readiness Command (FORCECOM);

Deputy Commander, Pacific Area



FORCECOM Mission & Vision



Mission

FORCECOM provides ready forces to meet the supported commander's current and future operational requirements.

<u>Vision</u>

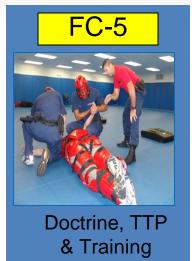
FORCECOM will be the provider of preeminent mission-ready maritime safety, security and stewardship capabilities.



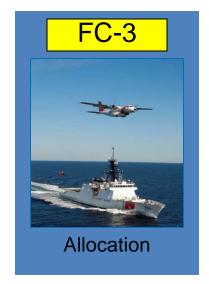
FORCECOM's Integrated Processes

















FORCECOM "Making Progress..."





- TTP Innovation from the Field
- GMT Reduction





- Develop Doctrine Structure
- Readiness Dashboard

Dygryley > WHEC 378 Cutters											
Cattern	1-24	Next U/N	Next Plasien TACON	Next Hission	Cutter Matus	Personnel	Equipment	Supply	Training	Overall Resiliens	CO's Assessment
COC MIDGETT (KOD)98)			Other	Drug	A						
CGC RURH (600074)			D17	Fish .	A						
CEC HARILTON (800383)			011	Orag	A	711	10	111	in.	m	-
CGC HORGENTHAN (040740)	12/(4/20)9	11/29/2009	011	Feb.	6						
(GC HILLON (000974)	11/12/2014	11/17/109	01)	(ther	0						
(GC MUNRO (010511)			017	Fish.	0						
CGC SHEEPMAN (000G)(6)			Other	DNG	A						



- Consolidated Assessment Visits
- Global Allocation of Forces





Closing Remarks



http://uscg.mil/modernization



Back-up Slides





Back-up Slides



- 1) Gilbert Study In August 1986, the Commandant concluded that consolidation of some common support functions on an area-wide basis might save resources.
- 2) 1998 Integrated Operations Command (IOC) evaluation
- 3) 1999 Longview strategy exercise completed. This was a Comprehensive strategy exercise which identified ten core strategies and a series of related initiatives
- 4) The terror attacks of September 11, 2001 prompted the Coast Guard to build upon the Long View ideas through the next generation of scenario-based planning
- 5) Evergreen I resulted in the development of four strategic imperatives and eleven core strategies
- 6) 2004 Logistics Management Transformation Office (LMTO) established
- 7) Upon recommendation from the LMTO, the LTPIO was established in July 2005 to carry out the task of transitioning the Coast Guard to a common Logistics Business Model across all asset groups (Aviation, Naval, C4IT, Facilities, and Personnel).
- 8) President publishes strategy for Maritime Security in 2005
- 9) In the Summer/Fall 2005 Hurricanes Katrina and Rita highlighted even more the need for a system that maximizes resources and response to minimize casualties during national disasters
- 10) Jan 2006 Project 126 Quick Studies report provided core strategic, operational, and tactical functions for the C2 study
- 11) The CIAO #7 objective to develop a framework to complete the Operational Command and Control organization assessment IAW COMDT was addressed Command and Control Organization (C2) Study Group final report, published in Sep 2006
- 12) CIAO #4 Aug 2006 Logistics Organizational Alignment Team (LOAT) report was a result of the issuance of CIAO #4 and the approval of the Commandant to transform CG Logistics into a bi-level, life cycle maintenance system and to develop the Mission Support Organization.
- 13) 2006-2009 Evergreen II began from CIAO #6 to ensure the CG renew the Evergreen Cycle and the CG strategic visions to bridge the strategic intent of COMDT Allen to the watch of the next COMDT
- 14) Summer 2006 Commandant Issues 10 Commandant Intent Action Orders (CIAOs). The CIAOs were issued to direct service wide reorg and strategy development to enable more effective mission execution (language taken from signed memo)
- 15) CIAO #2 objectives achieved in Nov 2006 CG HQ reaches initial operation capability; reorganizes into numbered staff
- 16) Jan 2007 Coast Guard Maritime Strategy is published
- 17) Mar 2007 CIAOs integrated into Modernization Efforts (MEs) (DCO, DCMS, FORCEOM ORCOM)

Key Benefits of the Coast Guard Modernization

- Transforms the Coast Guard into a change-centric organization.
- *Stronger* focus on the needs of our workforce.
- Unifies overall operational Command and Control.
- Standardizes doctrine, tactics, techniques and procedures.
- Enhances and unifies Mission Support systems.
- Reduces layers of bureaucracy and operational friction.
- Develops life-cycle sustainment in Acquisitions.
- Significantly elevates support to the field and our operators.
- Bolsters Coast Guard/maritime stakeholder relations.

Ultimately positions the Coast Guard for long-term successful mission execution.



FORCECOM Mission



Mission

ready forces to meet the supported commander's current and future operational requirements.





FORCECOM Vision



Vision

FORCECOM will be the provider of preeminent mission-ready maritime safety, security and stewardship capabilities.



